

がんサバイバーシップガイドライン 身体活動・運動編
(Japan's Cancer Survivorship Guidelines for Exercise and Physical Activity)

令和4年度 国立がん研究センターがん研究開発費
「科学的根拠に基づくがんサバイバーシップガイドライン提言に関する研究」班
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ガイドラインサマリー

CQ1

運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？

推奨文：運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることを提案する。

推奨の強さ：弱，エビデンスの強さ：C（弱）

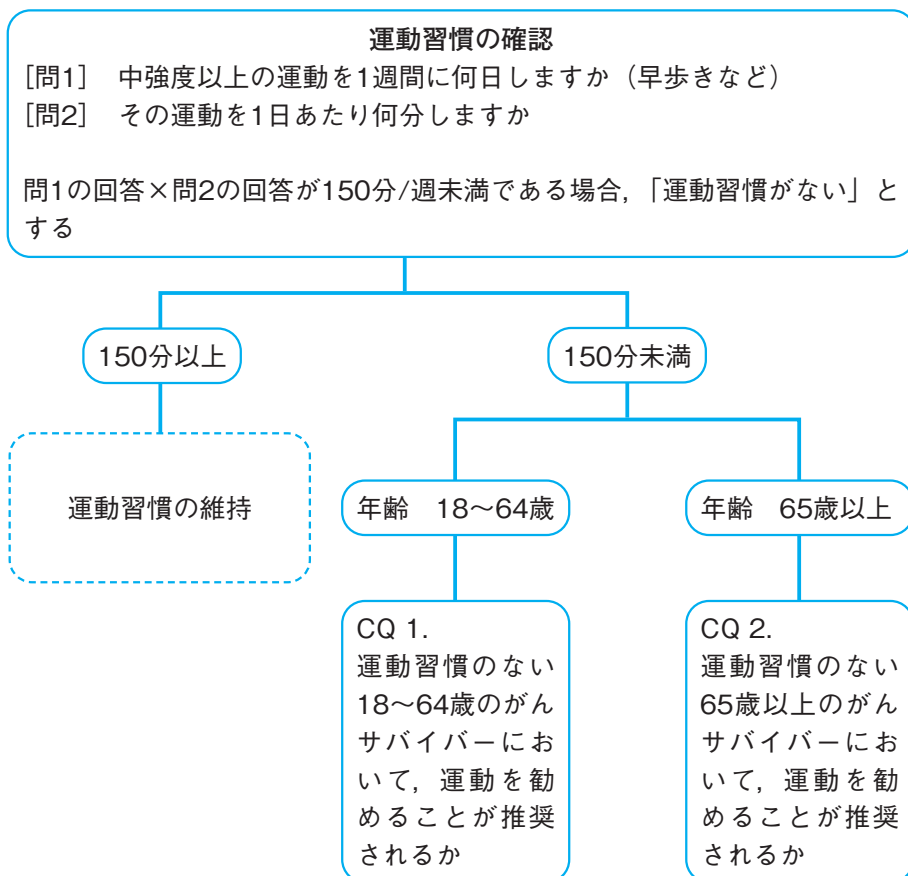
CQ2

運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？

推奨文：運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることを提案する。

推奨の強さ：弱，エビデンスの強さ：B（中）

診療アルゴリズム



用語・略語一覧

表1 重要用語の定義

| 用語名 | 解説 |
|------------------|--|
| 重要臨床課題 | 診療ガイドラインが取り上げる臨床上の課題のこと。 |
| クリニカルクエスチョン (CQ) | 診療ガイドラインで取り上げることが決まった重要臨床課題に基づいて、疑問の構成要素を抽出したもの。 |
| アウトカム | 研究がもたらす本質的な成果のこと。 |
| アウトカムの重要性 | クリニカルクエスチョン (CQ) の作成時に、複数のアウトカムの中から介入を受ける患者にとって、どの程度重要と考えられるかを評価すること。 |
| スコープ | 診療ガイドラインが取り上げる事項や方法論を明確にするための文書。 |
| 診療アルゴリズム | 診療の流れを図示して、クリニカルクエスチョン (CQ) の位置付けを明示したもの。 |
| ランダム化比較試験 | 介入群と対照群にランダム割り付けを行い、介入の実施後、アウトカムを観察することで、介入群と対照群を比較する研究方法。介入の効果を明らかにする上では最も優れた研究方法である。 |
| システマティックレビュー | 学術文献を系統的に検索・収集し、類似した研究を一定の基準で選択・評価した上で、明確で科学的な手法を用いてまとめる研究、またはその成果物のこと。定性的システマティックレビューでは、さまざまなバイアスを評価して、介入／要因曝露の効果への影響を推定する。また、統計学的手法を用いて効果指標が定量的に統合されるメタアナリシスが行われる。 |
| コクランレビュー | 医学論文のシステマティックレビューを行う国際的団体のコクランが作成している、質の高いシステマティックレビューとして定評のあるもの。 |
| 益と害 | 益とは、介入によってもたらされると期待される望ましい効果のこと。害とは、介入によってもたらされる有害事象のこと。 |
| ヘルスケア | 健康の維持や増進のための行為や健康管理のこと。 |
| 疾病予防運動施設 | 医療法42条に基づいて認可された、医療法人が運営する運動療法施設。 |
| 生活習慣病 | 食事や運動・喫煙・飲酒・ストレスなどの生活習慣が深く関与し、発症の原因となる疾患の総称。 |
| 晩期障害 | 放射線療法や化学療法、または外科手術などによる治療が終了してから、数か月あるいは数年経過した後に生じる健康上の問題。 |
| 骨髄抑制 | 骨髄の働きが低下している状態で、赤血球、白血球、および血小板の数が減少する。 |
| 造血幹細胞移植 | 通常の化学療法や免疫抑制療法だけでは治すことが難しい血液がんや免疫不全症などに対して、完治させることを目的として行う治療。 |
| プライマリケア | 緊急の場合の対応から、健康診断の結果についての相談を幅広く行う医療のこと。 |

表2 略語一覧

| 略語名 | 正式名称 |
|---------------|---|
| ACS | American Cancer Society アメリカがん協会 |
| ACSM | American College of Sports Medicine アメリカスポーツ医学会 |
| ADL | Activities of Daily Living 日常生活動作 |
| ASCO | American Society of Clinical Oncology アメリカ臨床腫瘍学会 |
| BDI-II | Beck Depression Inventory-II ベック抑うつ質問票 |
| CDC | Center for Disease Control and Prevention アメリカ疾病予防管理センター |
| CES-D | The Center for Epidemiologic Studies Depression Scale うつ（抑うつ状態）自己評価尺度 |
| COI | Conflict of Interest 利益相反 |
| CQ | Clinical Question クリニカルクエスチョン |
| DRI sum score | Disability Rating Index sum score |
| EBM | Evidence-Based Medicine 根拠に基づく医療 |
| EORTC QLQ-C30 | The European Organization for Research and Treatment of Cancer QLQ-C30 |
| FACIT-FS | Functional Assessment of Chronic Illness Therapy- Fatigue Subscale |
| FACT-Cog PCI | Functional Assessment of Cancer Therapy - Cognitive Function: perceived cognitive impairments |
| FACT-F | Functional Assessment of Cancer Therapy: Fatigue |
| FACT-G | Functional Assessment of Cancer Therapy: General |
| FSS | Fatigue Severity Scale |
| HADS | Hospital Anxiety and Depression Scale |
| HINTS調査 | Health Information National Trends Survey ヘルスコミュニケーション・健康情報技術に関する全国調査 |
| Minds | Medical Information Distribution Service EBM普及推進事業 |
| NCCN | National Comprehensive Cancer Network（全米総合がん情報ネットワーク） 患者ケア，研究，そして教育に専念する，28の米国の主要ながんセンターによる非営利団体 |
| NCI | National Cancer Institute アメリカ国立がん研究所 |

| | |
|-------------|---|
| PFS | Piper Fatigue Scale |
| POMS | Profile of Mood States 気分プロフィール検査 |
| QoL | Quality of Life 生活の質 |
| SCFS | The Schwartz Cancer Fatigue Scale |
| SF-36 (MCS) | The 36-Item Short Form Health Survey (Mental component summary) |
| SF-36 (PCS) | The 36-Item Short Form Health Survey (Physical component summary) |
| SMD | Standardized Mean Difference |
| VAS | Visual Analogue Scale |

(アルファベット順)

作成組織・作成方針

1. 作成組織

1) 作成主体

| | |
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| 学会・研究会名 | 令和4年度 国立がん研究センターがん研究開発費 「科学的根拠に基づくがんサバイバーシップガイドライン提言に関する研究」班 |
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※上記のリストは、診療ガイドライン統括委員会結成時から現在に至るまでの全メンバーを含んでおり、所属は結成時または加入時のもの。

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2. 作成経過

1) 作成方針

本診療ガイドラインの作成の目的は、がんサバイバーにおいて身体活動・運動に関する推奨を提示することにより健康アウトカムを改善することである。作成にあたっては、可能な限り「Minds診療ガイドライン作成マニュアル2017」に準拠し、ガイドライン作成の全過程を通じて作成の厳密さ、作成過程の透明性の確保に留意した。

2) 使用上の注意

本診療ガイドラインは、がんサバイバーに対する身体活動・運動の推奨を掲示するものであり、医療現場の裁量を制限するものではない。

3) COI

本診療ガイドライン作成に入る際に、作成委員に利益相反申告書の提出を求めた。ガイドラインの作成に関わる委員は、特定の企業（身体活動・運動に関する企業等）からの研究費支援を受けていないことを確認した。

4) 作成資金

本診療ガイドライン作成の資金源は、平成30年度国立がん研究センター研究開発費「がんサバイバーシップのガイドライン提言と科学的根拠に基づく健康行動支援の実践に関する研究」班ならびに令和3年度国立がん研究センター研究開発費「科学的根拠に基づくがんサバイバーシップガイドライン提言に関する研究」班に基づく。

5) 組織編成

〈ガイドライン統括委員会〉

「がんサバイバーシップガイドライン 身体活動・運動編」作成の組織は、主体組織を国立がん研究センター研究開発費「科学的根拠に基づくがんサバイバーシップガイドライン提言に関する研究」による「がんサバイバーシップガイドライン」作成統括委員会とし、主な2部組織を中心に構成された。

主な2部組織は、「がんサバイバーシップガイドライン」作成統括委員会、診療ガイドライン作成グループである。「がんサバイバーシップガイドライン」作成統括委員会は、2018年10月に結成され、22名により編成された。統括委員会による対面会議とオンラインアンケートにより、ガイドライン全体スコープの合意形成を行い、優先的に作成すべき重要臨床課題として「身体活動を高く維持すること」が選定された。その後、「がんサバイバーシップガイドライン 身体活動・運動編」の診療ガイドライン作成グループが結成された。

〈診療ガイドライン作成グループ〉

「Minds 診療ガイドライン作成マニュアル 2017」に則り、2019年4月に診療ガイドライン作成グループの結成、事務局の設置がなされた。診療ガイドライン作成グループは、運動、リハビリテーション、腫瘍内科、総合内科、精神保健学の各専門家によって構成された。

〈システマティックレビューチーム〉

システマティックレビューチームは、一次スクリーニング時に専門性の高い委員を外部より募集し、2名で編成された。その後、二次スクリーニング以降は外部より募集した2名を含め、診療ガイドライン作成グループが兼任し実施した。外部より募集した2名については、二次スクリーニング以降は診療ガイドライン作成グループを兼任した。

6) 作成工程

〈準備〉

2019年2月にガイドライン統括委員会における「身体活動」委員とガイドライン統括委員長による診療ガイドライン作成グループの委員の選定を実施した。委員は、運動、リハビリテーション、腫瘍内科、総合内科、精神保健、公衆衛生学の専門家が含まれるよう選定された。2019年4月に診療ガイドライン作成グループが構成され、キックオフミーティングが開催された。

〈スコープ〉

2019年5月、7月に第2回、第3回班会議が開催され、診療ガイドライン作成グループによりスコープ作成が行われた。診療ガイドラインがカバーする範囲等については、ガイドライン統括委員会でスコープ全体の作成方針が決定されていたため、スコープ作成は重要臨床課題、CQの選定が行われた。アウトカムは、診療ガイドライン作成グループメンバーでCQごとに臨床的に重要であると考えられたものをリストアップした。そして、臨床の重要度について1～9点の9段階で各メンバーが採点し、その平均を算出し、上位7項目をシステムティックレビューで取り上げるアウトカムとした。各CQに対して、システムティックレビューに関する事項が決定された。システムティックレビューに関する事項は、エビデンスの検索方法（エビデンスのタイプ、データベース、検索方法、検索対象期間）、文献の選択基準及び除外基準、エビデンスの評価と結果の統合方法が該当する。これらを経て、スコープが決定された。スコープの具体的内容として主な3事項（診療ガイドラインがカバーする内容に関する事項、システムティックレビューに関する事項、推奨作成から最終化・公開までに関する事項）を決定した。1事項目のガイドラインがカバーする内容に関する事項は、タイトル、目的、トピック、想定される利用者、既存ガイドラインとの関係、重要臨床課題、診療ガイドラインがカバーする範囲、CQリストが含まれる。2事項目のシステムティックレビューに関する事項は、レビュースケジュール、エビデンスの検索、文献の選択基準、除外基準、エビデンスの評価と結果の統合方法が含まれる。3事項目の推奨作成から最終化・公開までに関する事項では、推奨作成の基本方針、最終化、外部評価の具体的方法、公開の予定が含まれる。

〈システムティックレビュー〉

システムティックレビューは、診療ガイドライン作成グループが兼任し実施した。2019年8月に開催された第4回班会議を経て、各CQのシステムティックレビューを開始した。エビデンスの収集時、検索式の決定や文献検索に関する議論を2019年9月、10月に開催された第5回、第6回班会議で行い、国立がん研究センター図書館事務員、筑波大学図書館事務員の協力を得て、スコープに基づくエビデンスの検索が実施された。一次スクリーニングは、2019年12月、2020年3月、4月に第7回、第8回、第9回班会議にて進捗ならびに結果の報告を行い、二次スクリーニング対象研究を選定した。二次スクリーニングの結果は、2020年5月に開催された第10回班会議にて報告され、定性的システムティックレビュー対象研究を選定した。その後、定性的システムティックレビューによるエビデンスの個別評価がなされ、これらをまとめてエビデンスの総体評価を行った。2020年8月に第11-1回、第11-2回の班会議が開催され、エビデンス総体の確認、確実性評価に関する議論を行った。また、各アウトカムについて評価手法が類似する研究については定量的統合（メタアナリシス）を行った。システムティックレビューは、2020年8月に終了した。

〈推奨作成〉

推奨は、複数回の班会議を重ねて決定した。2020年8月、9月に第12-1回、第12-2回班会議を開催し、2つのCQに対する推奨作成に関する議論を実施し、推奨草案を掲示した。また、専門家以外の視点を取り入れるために、2020年9月に第13回班会議を開催し、患者意見を代表する当事者兼ガイドライン統括委員を加えた議論を行った。

〈最終化〉

2022年7月に草案初稿に対して診療ガイドライン作成グループメンバー間で相互査読を行った。2022年8月の草案完成後、2022年10月に統括委員会の確認を経て、2023年9月に外部評価を受けた。外部評価は、事前に外部評価委員へ草案を回覧後、診療ガイドライン作成委員長より草案の概要を説明し、外部評価委員と質疑応答を行った。説明会終了後、外部

評価委員は、個別にコメントを提出した。診療ガイドライン作成グループは、外部評価のコメントを踏まえて内容の修正を行い、2023年12月にメール会議にて合意に至った。2023年12月に修正後の草案を外部評価委員へ回覧し、診療ガイドライン作成委員長より草案の修正内容を説明し、外部評価委員と質疑応答を行った。外部評価委員は、個別にコメントを提出した。なお、修正後の草案に対する追加の修正が必要なコメントは無かった。2024年2～3月に、パブリックコメントを収集した。パブリックコメントの募集案内は、国立がん研究センター東病院ホームページへの掲載と日本がんサポートケア学会の会員にメール配信で周知された。診療ガイドライン作成グループは、パブリックコメントの結果を踏まえて草案を最終化し、2024年4月にメール会議にて合意に至った。

スコープ

1. 疾患トピックの基本的特徴

1) 臨床的特徴

全米がんサバイバーシップ連合（National Coalition for Cancer Survivorship：NCCS）は、多くのがん体験者が治療後の晩期障害や精神的苦痛、経済困難など多くの課題を抱えて生きていることに注目し、「がんと診断された人はその瞬間からがんサバイバーとなり、一生サバイバーであり続ける」と定義している。サバイバーシップとはこの概念を拡大したもので、がんと診断されてから、生存期間の長短にかかわらず、そのすべての過程と、関わる家族や介護者、友人をも含む。がんの治療を終了したらそれで医療は終わりということではなく、がんサバイバーの生活や人生にも配慮した医療やヘルスケアを提供することが求められてきている。

わが国のがん対策は、がん対策基本法及びがん対策推進基本計画に基づいている。2017年に策定された「がん対策推進基本計画（第3期）」において公衆衛生・政策形成等に関する公的な研究が不十分との指摘がなされ、「国は患者の声を取り入れながら、がん罹患後の社会生活に関する研究や、中長期的な後遺症に対する診療ガイドラインを作成するための研究を推進する」ことが示された。海外ではNational Comprehensive Cancer Network（NCCN）、American Society of Clinical Oncology、American Cancer Society（ACS）等が、身体的・心理社会的な影響、再発予防や二次がん、健康行動、そして経済的な課題への対応等、がんサバイバーシップに係るガイドラインを公表している。2018年、わが国初のがんサバイバーシップガイドライン提言の研究班が立ち上がった。国内ではがんサバイバーシップに関するエビデンスレビューや包括的なガイドライン作成は行われていないことが明らかとなった¹⁾。NCCNサバイバーシップガイドラインの章立てとパネル構成員・専門領域を参照し、がんサバイバーシップガイドラインの統括委員会が編制された。対面会議とオンラインアンケートにより、ガイドライン全体スコープの合意形成を行い、優先的に作成すべき重要臨床課題として「身体活動を高く維持すること」が選定された²⁾。

ACSは2003年のがん治療中・治療後の栄養と身体活動に関するガイドライン³⁾を発表し、2012年に改訂版が発表された⁴⁾。2012年版は、がんサバイバーの日常生活における目標として、健全な体重の維持、活動的な生活習慣、健康的な食生活を推奨した。2010年にAmerican College of Sports Medicine（ACSM）から発表されたガイドライン⁵⁾では、「1週間に150分以上有酸素運動を行うことを目標とする。1週間のうち2日以上はレジスタンストレーニングを行う、可能であれば大筋群のストレッチを毎日行う」ことが推奨された。2012年のコクランレビューでは、運動は治療後の成人がんサバイバーにおける健康関連QoL（Quality of Life：生活の質）を改善することが示唆された⁶⁾。最近の系統的レビューにおいても、運動はがん治療中ならびに治療後の時期においても安全に実施することができ、持久性体力、筋力、倦怠感、健康関連QoL、うつなど複数の健康アウトカム改善につながることを示された⁷⁾。2018年にACS、ACSM、Center for Disease Control、National Cancer Institute、NCCN等、全20団体のステークホルダーが集合した会議が行われ、2019年のがんサバイバーのための運動ガイドラインが公表された⁸⁾。ガイドラインには、「がんサバイバーにおける運動は一般的に安全であり、がんサバイバーは身体活動不足を避けるべきである」「有酸素性運動、有酸素性運動とレジスタンス運動の組み合わせ、レジスタンス運動はがん関連健康アウトカム（不安、うつ、倦怠感、身体機能、QoL）を改善する十分なエビデンスがある」が記述された。NCCNサバイバーシップガイドライン2019年版では、予防衛生の項で身体活動を扱い、「1週間に少なくとも150～300分の中強度運動あるいは75分の高強度運動、あるいはそれらと同等の組み合わせの運動を行うこと。1週間のうち2日以上はレジスタンストレーニングを行う、可能であれば大筋群のストレッチを少なくとも週に2回行う」ことが推奨された。

国際的には、系統的レビューやガイドラインにおいてがんサバイバーに対する運動が推奨されているが、わが国では日本リハビリテーション医学会による「がんのリハビリテーション診療ガイドライン」、日本乳癌学会の「乳癌診療ガイド

ライン疫学・診断編」において、がん種別に運動／身体活動が推奨されているのみである。厚生労働省が推進している健康日本21では「健康づくりのための身体活動基準2013」が作成されているが、ライフステージに配慮した健康づくりとして、18～64歳と65歳以上の身体活動の基準を区別している。年齢への配慮はわが国独自のものである。

わが国でがん患者に運動療法を実施する場合、入院中のがん患者であって、「ア 当該入院中のがんの治療のための手術、骨髄抑制を来しうる化学療法、放射線治療若しくは造血幹細胞移植が行われる予定の患者又は行われた患者。イ 在宅において緩和ケア主体で治療を行っている進行がん又は末期がんの患者であって、症状増悪のため一時的に入院加療を行っており、在宅復帰を目的としたリハビリテーションが必要な患者」に「がん患者リハビリテーション料」を算定可能とされている。Mullan⁹⁾とMillerら¹⁰⁾が定義した、がん初期治療終了後の移行期 (transitional survivorship)、治療終了後から数年の延長期 (extended survivorship)、より長期間続く永続期 (permanent survivorship) では、残念ながらその算定要件を満たさない。

1992 (平成4) 年の医療法改正により、医療法人の附帯事業として疾病予防運動施設が認められた。医療法42条第5号には「疾病予防のために有酸素運動 (継続的に酸素を摂取して全身持久力に関する生理機能の維持又は回復のために行う身体の運動をいう。) を行わせる施設であって、診療所が附置され、かつ、その職員、設備及び運営方法が厚生大臣の定める基準に適合するものの設置」とされており、医療機関において生活習慣病などの疾病予防のための運動施設の開設が認められている。疾病予防運動施設の要件として以下のことが定められている。1) 職員については、健康運動指導士その他これに準ずる能力を有する者を配置すること。2) 設備については、次に掲げるものを有すること。イ トレッドミル、自転車エルゴメーターその他の有酸素性運動を行わせるための設備、ロ 筋力トレーニングその他の補強運動を行わせるための設備、ハ 背筋力計、肺活量測定用具その他の体力を測定するための機器、ニ 最大酸素摂取量を測定するための機器、ホ 応急の手当を行うための設備。3) 運営方法については、次に掲げる要件を満たすこと。イ 成人病その他の疾病にかかっている者及び血圧の高い者、高齢者その他の疾病予防の必要性が高い者に対し、適切な保健指導及び運動指導を行う施設として運営されること。ロ 附置される診療所は、施設の利用者に対する医学的な管理を適切に行えるよう運営されること。ハ 会員等の施設の継続的な利用者に対して健康診断、保健指導及び運動指導を実施すること。ニ 会員等の施設の継続的な利用者に対して健康記録カードを作成し、これを適切に保存、管理すること。

また厚生労働省が1988 (昭和63) 年より国民の健康づくりを推進する上で一定の基準を満たしたスポーツクラブやフィットネスクラブを認定しその普及を図るため「運動型健康増進施設認定規定」を策定し、運動型健康運動増進施設として大臣認定を行っている。

わが国では、臓器別の専門医が、がん治療後のフォローアップケアを担ってきた歴史があり、臓器横断的なケアを行う医療者が不足し、米英のようなプライマリケア医の制度も根付いていない。わが国の健康保険制度は、長期間のケアを必要とするがんサバイバーを想定してはいないが、がん専門医療機関の医療者が、医療法42条の疾病予防運動施設や厚生労働大臣認定運動型健康運動増進施設と連携を進めていけば、がんサバイバーの身体活動を高め、運動指導していく体制を整備していくことができる可能性がある。

2) 疫学的特徴

日本では2人に1人ががんに罹患する時代を迎えている。具体的には2015年データに基づく生涯のがん罹患リスクは男性63%、女性48%、そして、がん罹患患者数の2019年推計値は、1,017,200例 (男性572,600、女性444,600) である (公益財団法人がん研究振興財団、がんの統計19)。15歳以上のがんサバイバー数は、2000年に約150万人であったが2020年には230万人に増加することが報告されている (国立研究開発法人国立がん研究センター、がん情報サービス)。がん医療の進歩とともに、わが国のがんの5年相対生存率は20世紀後期 (1993～1999年) の54.3%から、最近 (2006～2008年) は62.1%に向上している。がんサバイバーの中にはがんと向き合い、あるいは克服した上で、がんと共存し社会で活躍する人が増えている。

身体活動／運動の利益が示されているにもかかわらず、推奨される水準以上に身体活動を高く維持しているがんサバイバーは少ない。2003年の米国Health Information National Trends Survey (HINTS) 調査では、がん罹患後に定期的に身体活動を高く維持している割合は619名中45%、乳がんサバイバーでは32%と報告されている¹¹⁾。ACSが全米9,105名のがんサバイバー (乳がん、前立腺がん、大腸がん、膀胱がん、子宮がん、皮膚がん) を対象に実施したライフスタイル

調査において、ガイドラインで推奨する身体活動を遵守していた乳がんサバイバーは37%であった¹²⁾。

3) 疾患トピックの診療の全体的な流れ

がんサバイバーの定義は、広義には「がんの診断を受けた人は、その瞬間から生涯にわたって、がんサバイバーである。家族、友人、ケアにあたる人々も、当人のサバイバーシップ体験から強い影響を受けるため、がんサバイバーに含まれる」である。しかし本ガイドラインにおいては、ガイドライン統括委員会において、その対象とする範囲は、「18歳以降にがんと診断された患者本人で、がんが治癒しているか、安定している人」とし、「がん薬物療法施行中の人（ただし、血液がんの維持目的の化学療法や乳がん、前立腺がんなどにおける再発予防のホルモン療法は除く）、がん再発、転移治療中ならびに終末期の人、家族・友人・ケアにあたる人々」は含まないことを決めた²⁾。

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2. 診療ガイドラインがカバーする内容に関する事項

1) 目的

がんサバイバーにおいて身体活動・運動に関する推奨を提示することにより健康アウトカムを改善することである。

2) カバーする範囲

18歳以降にがんと診断された患者本人で、がんが治癒しているか、安定している人。

3) カバーしない範囲

がん薬物療法施行中の人（ただし、血液がんの維持目的の化学療法や乳がん、前立腺がんなどにおける再発予防のホルモン療法は除く）、がん再発、転移治療中ならびに終末期の人。

4) トピック

18歳以上でがんと診断された人に対する身体活動・運動。

5) 本ガイドラインが想定する利用者

がんが治癒しているか安定している、18歳以降発症のがんサバイバーへのケアに関わる保健医療従事者を中心とするすべての人。

6) 本ガイドラインの利用が想定される臨床現場について

がんが治癒しているか安定している、18歳以降発症のがんサバイバーへのケアに関わる保健医療従事者を中心とするすべての人が利用する場所。

7) 既存のガイドラインとの関係

本ガイドラインは、新たに作成されるガイドラインである。National Comprehensive Cancer Network (NCCN) のサバイバーシップガイドラインを参考にしつつ、日本の保健医療システムに即したものにす。このガイドラインは、関連学会が作成する既存の疾患特異的なガイドラインの補足として使用される。

8) 重要臨床課題

運動をしていない人に運動を勧めるとき、問診で運動習慣があるかないかを尋ねる。

[運動習慣の定義 (American College of Sports Medicine (ACSM) の基準)]

問1 中強度以上の運動を1週間に何日しますか (早歩きなど)

問2 その運動を1日あたり何分しますか

問1の回答×問2の回答が150分/週未満である場合、「運動習慣がない」とする。

9) クリニカルクエスチョン (CQ)

CQ1. 運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？

CQ2. 運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？

3. システマティックレビューに関する事項

1) 実施スケジュール

文献検索に1か月、文献選定に2か月、エビデンスの評価と統合に3か月。

2) エビデンスの検索

- ①エビデンスタイプ：ランダム化比較試験
- ②データベース：PubMed, Cochrane Central, 医中誌, SPORTDiscus
- ③検索の基本方針：PICOフォーマットを利用
- ④検索対象期間：2019年9月30日まで

※ただし、対象論文で解析に必要な結果が記載されていない場合、ハンドサーチを行い、当該研究における副次論文を検索し、結果の有無を確認する。その場合は、検索対象期間を設定しない。

3) 文献の選択基準、除外基準

①文献の選択基準

- ・がんサバイバーを対象としている〔がんサバイバーの定義は「2. 2) カバーする範囲」を利用〕
 - CQ1の対象は、18～64歳の人が含まれる
 - CQ2の対象は、65歳以上の人が含まれる
- ・英語または日本語で記載されている
- ・ランダム化比較試験である
- ・抄録がないものも含む
- ・介入試験として運動が含まれる研究である

②除外基準

- ・既存の診療ガイドライン、システマティックレビュー、非ランダム化比較試験、観察研究である

4) エビデンスの評価と統合の方法

エビデンス総体の評価方法、エビデンス総体の示す強さの表現方法はすべて「Minds診療ガイドライン作成マニュアル2017」に準拠した。CQ1、CQ2について、定性的ならびに定量的システマティックレビューを実施した。

4. 推奨決定から公開に向けた最終調整、導入方針まで

1) 推奨作成の基本方針

推奨作成の基本方針は、「Minds診療ガイドライン作成マニュアル2017」の方法に準拠した。推奨に関する決定は、事前に決めたルールに基づき、診療ガイドライン作成グループの審議と投票を経て行った。委員は、運動、リハビリテーション、腫瘍内科、総合内科、精神保健、公衆衛生学の専門家で編成された。2019年4月から2020年9月まで計15回のパネル会議が開催された。また、専門家以外の視点を取り入れるために、2020年9月に開催された最終のパネル会議には、患者意見を代表する当事者兼ガイドライン統括委員を加えた議論を行った。推奨決定は修正デルファイ法に従い、診療ガイドライン作成グループが作成した推奨文章案に対して、オンライン投票を行い、委員の8割以上の合意により決定した。合意が得られなかった際は、委員による会議を行い、検討を繰り返した。

推奨は、CQに対する重要性の高いアウトカムのエビデンスの確実性（強さ）、益と害のバランスを中心に、患者の価値観、患者への負担、システマティックレビューの対象研究のバイアスリスクなどを考慮して決定した。推奨の強さは、強い：推奨する、弱い：提案する、として、エビデンスの確実性（強さ）を併記した（表1）。

表1 推奨決定のための、推奨の強さならびにアウトカム全般のエビデンスの確実性（強さ）

| 推奨の強さ | エビデンスの確実性 |
|---------|-----------|
| 強い：推奨する | A（強） |
| | B（中） |
| 弱い：提案する | C（弱） |
| | D（とても弱い） |

2) 最終化

関連学会・団体に外部評価を依頼・実施した後に行う。

3) 外部評価の具体的方法

外部評価委員が個別にコメントを提出する。診療ガイドライン作成グループは、各コメントに対して診療ガイドラインの内容を変更する必要性を討議して、対応を決定する。パブリックコメントに対しても同様に、診療ガイドライン作成グループは、各コメントに対して診療ガイドラインの内容を変更する必要性を討議して、対応を決定する。

4) 公開の予定

外部評価への対応後、ガイドライン統括委員会は、ガイドライン本文の最終案を策定する。その後、国立がん研究センター執行役員会に上記最終案を報告し、一般公開の承認を得る。

推 奨

1. 背景・目的

海外のガイドラインではがんサバイバーに対する運動が推奨されているが、運動習慣の有無や若年者と高齢者に分けた推奨が行われていない。今回のがんサバイバーシップガイドライン身体活動・運動編では、18歳以降にがんと診断された患者本人で、がんが治癒しているか、安定している人を対象に、米国スポーツ医学会の基準で運動習慣のない人を、18歳から65歳未満と65歳以上に分けて、運動を推奨することが勧められるかどうかを検討した。

2. CQ1

1) CQ

運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？

2) 推奨文

運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることを提案する。

推奨の強さ：弱

エビデンスの強さ：C（弱）

3) 解 説

〈エビデンスの選定基準〉

エビデンスの選定基準は、18歳以降にがんと診断され、がんが治癒しているか、安定しており、18～64歳の人を含んだがんサバイバーに対する身体活動・運動介入のランダム化比較試験とした。ランダム化比較試験における身体活動・運動介入の定義は、以下の「健康づくりのための身体活動基準2013」（厚生労働省）により定められた運動の定義に該当するものを採用した。身体活動のうち、体力の維持・向上を目的として計画的・意図的に実施し、継続性のある活動。

例：フィットネスクラブ等で行う筋力トレーニング、エアロビクスや水泳、テニス、サッカーなどのスポーツ、余暇時間におけるウォーキングやジョギング、活発な活動、趣味など。

※生活活動（日常生活における労働、家事、通勤・通学など）は含まない。対照群は、非介入（上記のような運動を実施しない）とした。

CQのアウトカムについては、12個挙げられたため、委員による会議でアウトカムの重要度について投票を行った。出席者の平均点を算出し、取り上げるアウトカムを決定した。委員による会議の結果、CQ1における重要度の高いアウトカムは、生存期間、持久性体力、筋力、健康関連QoL、倦怠感、うつ、運動関連有害事象とした。本ガイドラインで選定された各アウトカムの尺度は以下の通りである。

生存期間：本ガイドラインにおける生存期間の評価指標は、診断から一定期間後に生存している確率とした。

持久性体力：持久性体力の評価指標には、最大あるいは最高酸素摂取量、推定最高酸素摂取量、6分間歩行距離が含まれた。持久性体力とは、全身持久力や心肺持久力とも呼ばれ、できる限り長時間、一定の強度の身体活動・運動を維持できる能力である。

筋 力：筋力の評価指標には、最大挙上重量の評価による下肢最大筋力、簡易下肢筋力評価法による下肢筋力、握力が含まれた。筋が収縮するとき生まれる力であり、直立姿勢を保持する際に体を支えることや、ものを持ち上げるなどの能力である。

健康関連QoL：健康関連QoLの評価指標にはFACT-G (B, Cなども含む), EORTC QLQ-C30, SF-36 (PCS), SF-36 (MCS) が含まれた。健康関連QoLは、「疾患や治療が、患者の主観的健康感（メンタルヘルス、活力、痛みなど）や、毎日行っている仕事、家事、社会活動にどのようなインパクトを与えているか、これを定量化したもの」（福原，2002）と定義されている。

倦怠感：倦怠感の評価指標には、一般的な倦怠感の尺度とがん関連倦怠感としてPOMS, PFS, FACIT-FS, FACT-F, VAS, FSS, SCFS, Fatigue scaleが含まれた。倦怠感のうち、がん関連倦怠感は、「苦痛を伴う持続性疲労の主観的感覚、あるいは、がんやがん治療に関係した、行った運動に比例せず、通常の運動機能を妨げるような極度の疲労」（NCCN）と定義されている。

うつ：うつの評価指標には、BDI-II, CES-D, HADSが含まれた。うつは、気分が落ち込み、何をしても楽しめないといった精神症状とともに、眠れない、食欲がない、疲れやすいといった身体症状が出現する状態とされている。日常生活に大きな支障が生じている場合、うつ病と診断されることがある。

運動関連有害事象：運動実施時あるいは運動実施後に生じた有害事象が含まれた。内訳として、運動実施時の転倒による捻挫・打撲・骨折、肉離れ・靭帯損傷、運動実施後の腰痛・膝痛・疲労骨折、筋肉痛や一時的な心拍数・呼吸数・疲労感の増大などの報告が含まれた。


〈エビデンス評価〉

PubMed, Cochrane Central, 医中誌, SPORTDiscusにおいて、設定した検索式ならびにハンドサーチにより文献検索を行った結果、一次スクリーニング対象となった論文数は1,212件であった。その中で二次スクリーニング対象となった論文数は370件であった。さらに、論文評価の結果、74論文が定性的・定量的システマティックレビューの対象となった。採用された対象研究における運動介入の内訳は、有酸素性運動、筋力トレーニング、有酸素性運動と筋力トレーニングの組み合わせ、その他（ラジオ体操、気功、太極拳、ガーデニング、グループエクササイズ、日常生活の中で身体を動かす、ヨガなど）であった。


アウトカム1：生存期間

生存期間を評価したランダム化比較試験は1件のみ抽出されたため、メタアナリシスを行わなかった。対象論文1件の結果、身体活動介入群の生存期間は対照群と比べて有意な差が無かった（HR 0.86, 95%信頼区間0.35～2.14）。バイアスリスク評価の結果ならびに対象研究数が1件のみであったため、エビデンスの強さは“とても弱い(D)”とした。

アウトカム2：持久性体力

持久性体力における評価指標は、最大あるいは最高酸素摂取量、推定最高酸素摂取量、6分間歩行距離が含まれ、評価尺度を統合したもので評価した。持久性体力を評価したランダム化比較試験18件でメタアナリシスを行った結果、身体活動・運動介入による持久性体力は対照群と比較して有意に改善する（SMD 0.65, 95%信頼区間 0.34～0.95）ことが認められた。ただし、バイアスリスク評価の結果が中等度であり、メタアナリシスの結果よりI²は74%と研究間で高い異質性が観察された（1）。また、サンプル数が多いとはいえないことを考慮し、エビデンスの強さは“中(B)”とした。

アウトカム3：筋力

筋力における評価指標は、最大挙上重量の評価による下肢最大筋力、簡易下肢筋力評価法による下肢筋力、握力が含まれ、評価尺度を統合したもので評価した。筋力を評価したランダム化比較試験9件でメタアナリシスを行った結果、身体活動・運動介入による筋力は対照群と比較して有意に改善する（SMD 0.79, 95%信頼区間 0.22～1.36）ことが認められた。ただし、バイアスリスク評価の結果が中等度であり、メタアナリシスの結果よりI²は84%と研究間で高い異質性が観察された（2）。また、サンプル数が多いとはいえないことを考慮し、エビデンスの強さは“中(B)”とした。

アウトカム4：健康関連QoL

健康関連QoLにおける評価指標は、FACT-G (B, Cなども含む), EORTC QLQ-C30, SF-36 (PCS), SF-36 (MCS)

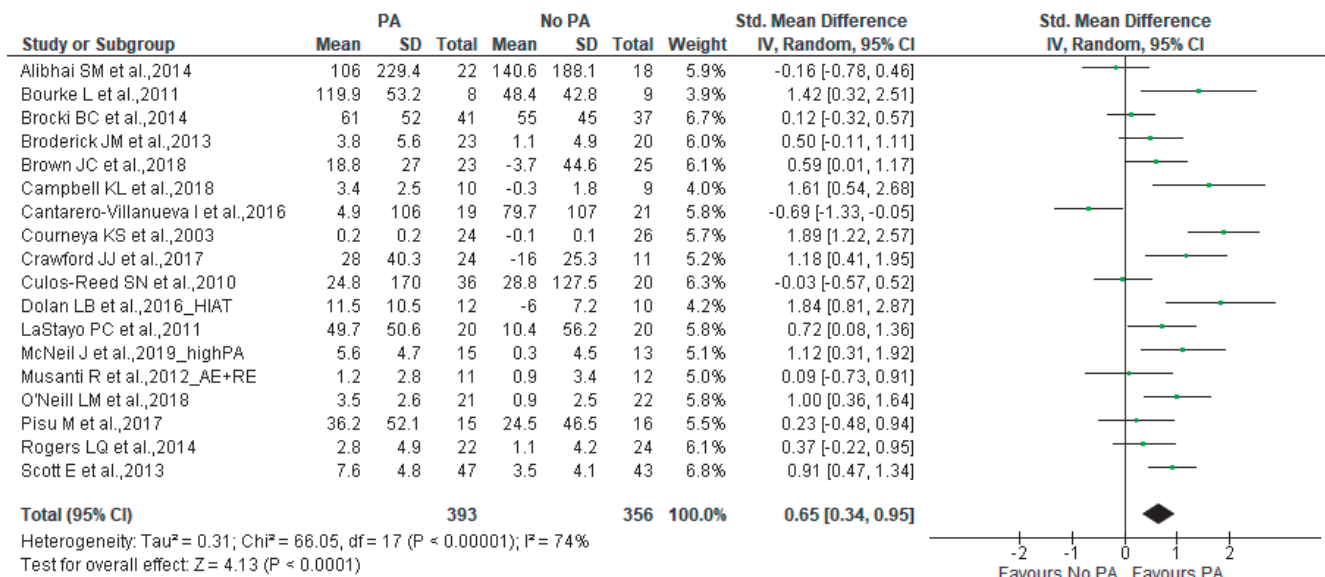


図1 運動介入と持久性体力に関するメタアナリシス結果

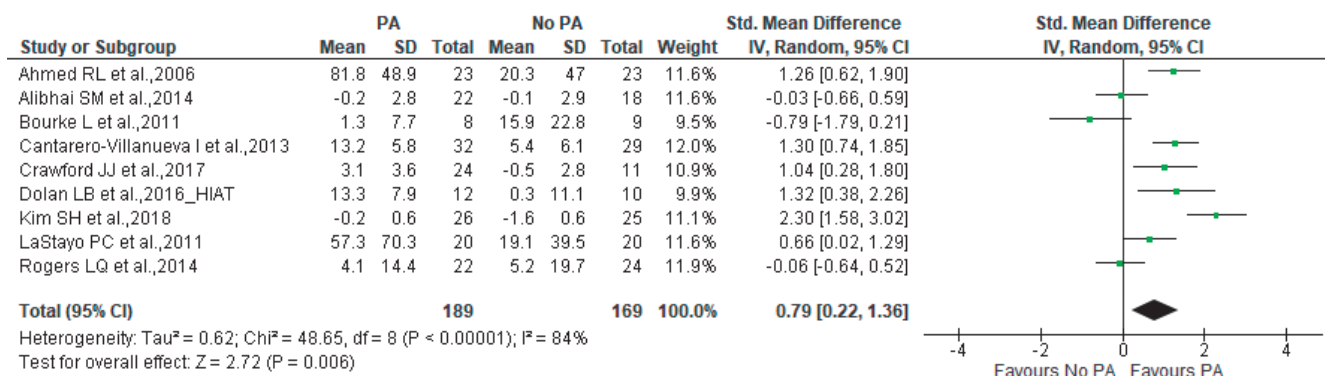


図2 運動介入と筋力に関するメタアナリシス結果

が含まれ、評価尺度を統合したもので評価した。QoLを評価したランダム化比較試験18件でメタアナリシスを行った結果、身体活動・運動介入による健康関連QoLは対照群と比較して有意に改善する (SMD 0.70, 95%信頼区間 0.25~1.14) ことが認められた。ただし、バイアスリスク評価の結果が中等度であり、メタアナリシスの結果よりI²は93%と研究間で高い異質性が観察された (図3)。また、サンプル数が多いとはいえないことを考慮し、エビデンスの強さは“中(B)”とした。

アウトカム5：倦怠感

倦怠感における評価指標は、POMS、PFS、FACIT-FS、FACT-F、VAS、FSS、SCFSが含まれ、評価尺度を統合したもので評価した。倦怠感を評価したランダム化比較試験17件でメタアナリシスを行った結果、身体活動・運動介入による倦怠感是对照群と比較して有意に改善する (SMD -0.50, 95%信頼区間 -0.74~-0.26) ことが認められた。ただし、バイアスリスク評価の結果が中等度であり、メタアナリシスの結果よりI²は71%と研究間で高い異質性が観察された (図4)。また、サンプル数が多いとはいえず、尺度の統一性が低いことを考慮し、エビデンスの強さは“中(B)”とした。

アウトカム6：うつ

うつにおける評価指標は、BDI-II、CES-D、HADSが含まれ、評価尺度を統合したもので評価した。うつを評価したランダム化比較試験5件でメタアナリシスを行った結果、身体活動・運動介入によるうつは対照群と比較して有意に改善

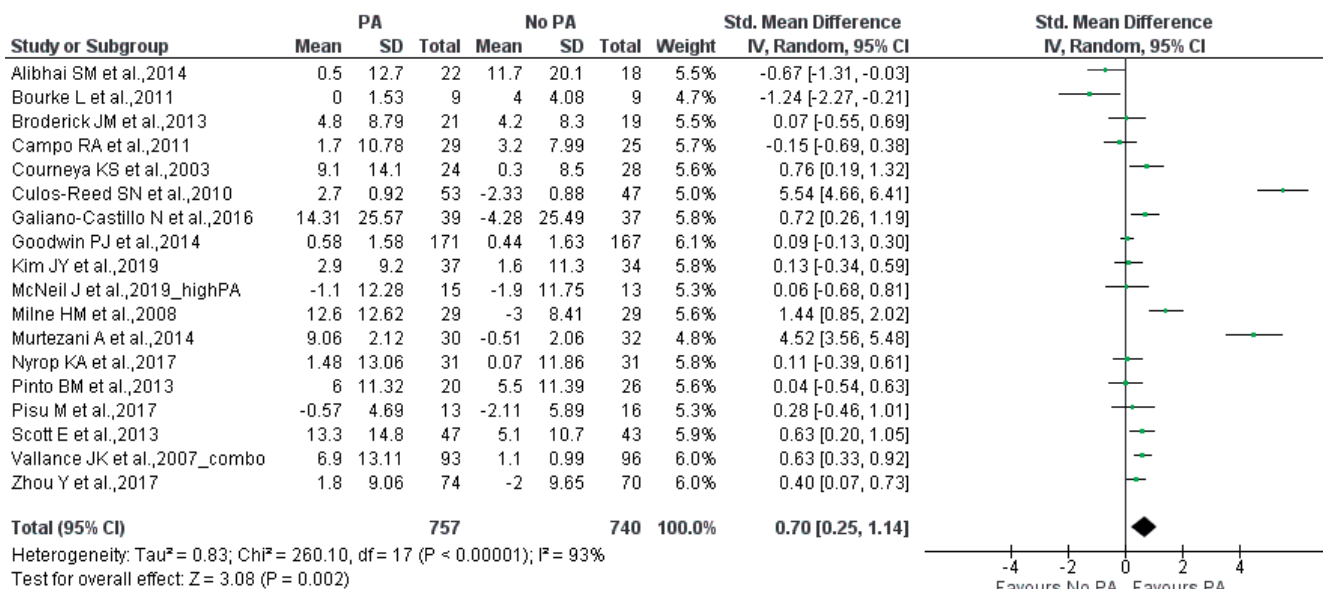


図3 運動介入と健康関連QoLに関するメタアナリシス結果

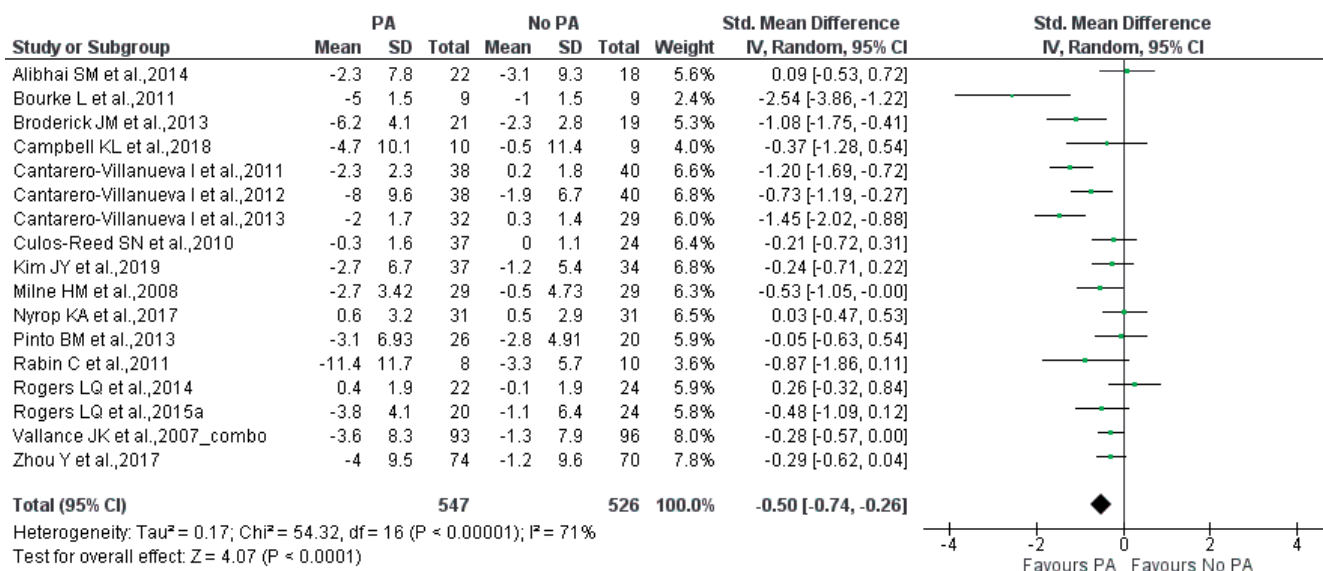


図4 運動介入と倦怠感に関するメタアナリシス結果

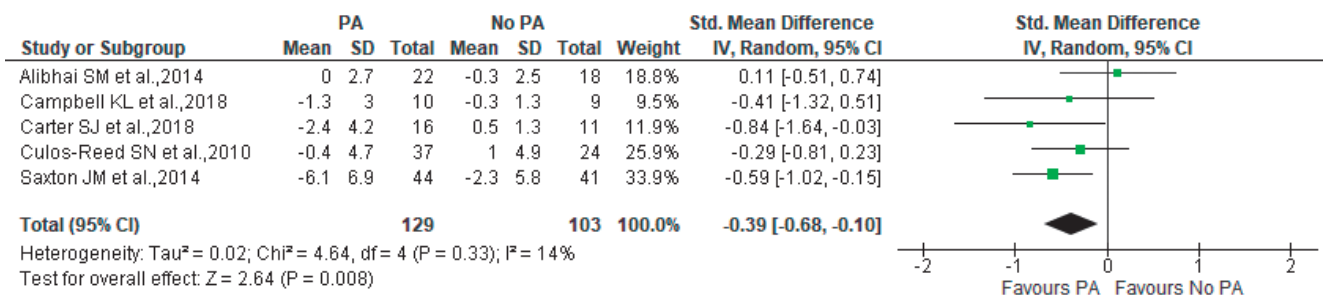


図5 運動介入とうつに関するメタアナリシス結果

する (SMD -0.39, 95%信頼区間 -0.68~-0.10) ことが認められた。また、メタアナリシスの結果よりI²は14%と研究間の異質性が低いことが観察された (図5)。ただし、バイアスリスク評価の結果が中等度であること、サンプル数が乏しい

こと、尺度の統一性が低いことを考慮し、エビデンスの強さは“弱(C)”とした。

アウトカム7：運動関連有害事象

運動関連有害事象は、各研究で研究参加者の何名に有害事象が発生したか報告されている文献に限り採用した。運動関連有害事象を評価したランダム化比較試験21件でメタアナリシスを行った結果、身体活動・運動介入による有害事象発生の相対リスクは対照群と比較して有意に高い (RR 2.83, 95%信頼区間 1.79~4.45) ことが認められた。また、メタアナリシスの結果より I^2 は13%と研究間の異質性が低いことが観察された (図6)。ただし、バイアスリスク評価の結果が中等度であること、サンプル数が多いとはいえないことを考慮し、エビデンスの強さは“中(B)”とした。運動関連有害事象の発生は、運動介入による筋肉痛などの報告が含まれるため、非介入と比較すると発生割合が高い結果となった。これは、文献中で介入群についてのみ記載されている場合に、非介入群の有害事象は考慮していない可能性がある。

有害事象を運動関連有害事象と規定するのであれば、非介入では運動を実施しないことから有害事象の発生割合が0となる。筋肉痛などの報告を運動関連有害事象と規定する以上、運動を実施しない場合より、運動を実施した場合に有害事象が起こることは当然となるが、内訳に運動を実施したことによる死亡、心血管イベントなどの重篤な有害事象は含まれなかった。

論文内に「有害事象の発生は無かった」と記載された研究を上述の結果と合わせると62件の研究で有害事象の発生の無が報告され、そのほとんどで有害事象の発生は確認されなかった。

〈推奨とエビデンスの強さ〉

推奨の作成にあたっては、運動による持久性体力や健康関連QoL、倦怠感の改善を重視した。アウトカムの重要性はQoLが8点 (エビデンスの強さ「B」)、全生存期間が7点 (エビデンスの強さ「D」)、持久性体力が7点 (エビデンスの強さ「B」)、倦怠感が7点 (エビデンスの強さ「B」) となった。全生存期間のエビデンスの強さがDであるものの、重要性が高いQoLを考慮し、総合的にエビデンスの確実性 (強さ) はC(弱)とした。推奨決定のためのパネル会議では、エビデンスの強さに加えて、益と害のバランス評価、患者の価値観、患者への負担、システムティックレビューの対象研究のバイアスリスクについて主に議論がなされた。益と害のバランス評価について、「益」のアウトカムは、運動による持久性体力や健康関連QoL、倦怠感の改善を重視した。「害」は心血管イベントを含む有害事象であった。内訳として、重篤な有害事象は極めて少なく、運動により通常生じるような一過性の有害事象であった。運動を実施したことによる死亡、心血管イベントなどの有害事象は無かった。観察された運動に伴う有害事象による望ましくない効果に照らし合わせて、持久性体力、QoL、倦怠感による望ましい効果が上回ると考えられる。重大と判断したアウトカムに置く価値の大きさや、運動に対する患者の好みや価値観は、大きくばらつきがあると考えられる。患者への負担については、運動自体には経済的な負担はないが、安全かつ有効な実践には高額ではないが経済的な負担が生じる。投票の結果、推奨の強さは、10名中1名が「運動習慣のない18~64歳のがんサバイバーにおいて、運動を勧めることを推奨する」、9名が「運動習慣のない18~64歳のがんサバイバーにおいて、運動を勧めることを提案する」に投票し、90%の合意をもって、「運動習慣のない18~64歳のがんサバイバーにおいて、運動を勧めることを提案する」に決定した。

以上から、本CQに対する推奨は、「運動習慣のない18~64歳のがんサバイバーにおいて、運動を勧めることを提案する。推奨の強さ：弱、エビデンスの確実性 (強さ) : C (弱)」とした。

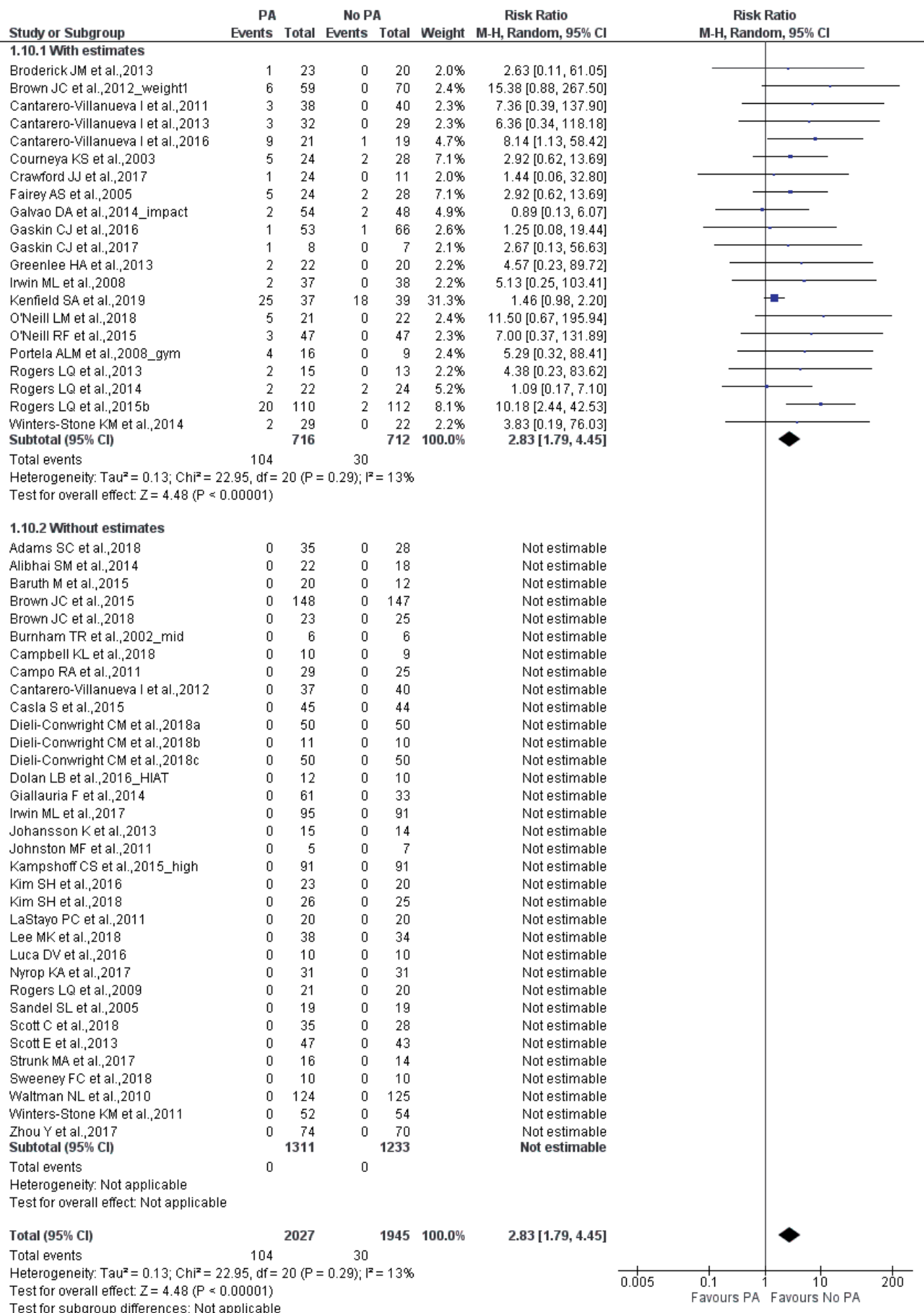


図6 運動介入と運動関連有害事象に関するメタアナリシス結果

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3. CQ2

1) CQ

運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？

2) 推奨文

運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることを提案する。

推奨の強さ：弱

エビデンスの強さ：B（中）

3) 解説

〈エビデンスの選定基準〉

エビデンスの選定基準は、18歳以降にがんと診断され、がんが治癒しているか、安定しており、65歳以上の人を含んだがんサバイバーに対する身体活動・運動介入のランダム化比較試験とした。ランダム化比較試験における身体活動・運動介入の定義は、以下の「健康づくりのための身体活動基準2013」（厚生労働省）により定められた運動の定義に該当するものを採用した。身体活動のうち、体力の維持・向上を目的として計画的・意図的に実施し、継続性のある活動。

例：フィットネスクラブ等で行う筋力トレーニング、エアロビクスや水泳、テニス、サッカーなどのスポーツ、余暇時間におけるウォーキングやジョギング、活発な活動、趣味など。

※生活活動（日常生活における労働、家事、通勤・通学など）は含まない。対照群は、非介入（上記のような運動を実施しない）とした。

CQのアウトカムについては、12個挙げられたため、委員による会議でアウトカムの重要度について投票を行った。出席者の平均点を算出し、取り上げるアウトカムを決定した。委員による会議の結果、CQ2における重要度の高いアウトカムは、生存期間、健康関連QoL、倦怠感、うつ、認知機能、ADL、運動関連有害事象とした。本ガイドラインで選定された各アウトカムの尺度は以下の通りである。

生存期間：本ガイドラインにおける生存期間の評価指標は、診断から一定期間後に生存している確率とした。

健康関連QoL：健康関連QoLの評価指標にはFACT-G（B、Cなども含む）、EORTC QLQ-C30、SF-36（PCS）、SF-36（MCS）が含まれた。健康関連QoLは、「疾患や治療が、患者の主観的健康感（メンタルヘルス、活力、痛みなど）や、毎日行っている仕事、家事、社会活動にどのようなインパクトを与えているか、これを定量化したもの」と定義されている。

倦怠感：倦怠感の評価指標には、一般的な倦怠感の評価指標とがん関連倦怠感としてPOMS、PFS、FACIT-FS、FACT-F、VAS、FSS、SCFS、Fatigue scaleが含まれた。倦怠感のうち、がん関連倦怠感は、「苦痛を伴う持続性疲労の主観的感覚、あるいは、がんやがん治療に関係した、行った運動に比例せず、通常の運動機能を妨げるような極度の疲労」（NCCN）と定義されている。

うつ：うつの評価指標には、BDI-II、CES-D、HADSが含まれた。うつは、気分が落ち込み、何をしても楽しめないといった精神症状とともに、眠れない、食欲がない、疲れやすいといった身体症状が出現する状態とされている。日常生活に大きな支障が生じている場合、うつ病と診断されることがある。

認知機能：認知機能を評価した研究は1件のみであり、評価指標はFACT-Cog PCIであった。

ADL：ADLを評価した研究は1件のみであり、評価指標はDRI sum scoreであった。

運動関連有害事象：運動実施時あるいは運動実施後に生じた有害事象が含まれた。内訳として、運動実施時の転倒による捻挫・打撲・骨折、肉離れ・靭帯損傷、運動実施後の腰痛・膝痛・疲労骨折、筋肉痛や一時的な心拍数・呼吸数・疲労感の増大などの報告が含まれた。

〈エビデンス評価〉

PubMed, Cochrane Central, 医中誌, SPORTDiscusにおいて、設定した検索式ならびにハンドサーチにより文献検

索を行った結果、一次スクリーニング対象となった論文数は903件であり、その中で二次スクリーニング対象となった論文数は370件であった。さらに、論文評価の結果、63論文が定性的システマティックレビュー、40論文が定量的システマティックレビューの対象となった。採用された対象研究における運動介入の内訳は、有酸素性運動、筋力トレーニング、有酸素性運動と筋力トレーニングの組み合わせ、その他（ラジオ体操、気功、太極拳、ガーデニング、グループエクササイズ、日常生活の中で身体を動かす、ヨガなど）であった。

アウトカム1：生存期間

生存期間を評価したランダム化比較試験は1件のみ抽出されたため、メタアナリシスを行わなかった。対象論文1件の結果、身体活動介入群の生存期間は対照群と比べて有意な差が無かった（HR 0.86, 95%信頼区間0.35~2.14）。バイアスリスク評価の結果ならびに対象研究数が1件のみであったため、エビデンスの強さは“とても弱い(D)”とした。

アウトカム2：健康関連QoL

健康関連QoLにおける評価指標は、FACT-G (B, Cなども含む)、EORTC QLQ-C30, SF-36 (PCS), SF-36 (MCS)が含まれ、評価尺度を統合したもので評価した。健康関連QoLを評価したランダム化比較試験17件でメタアナリシスを行った結果、身体活動・運動介入による健康関連QoLは対照群と比較して有意に改善する（SMD 0.70, 95%信頼区間 0.23~1.17）ことが認められた。ただし、バイアスリスク評価の結果が中等度であり、メタアナリシスの結果よりI²は94%と研究間で高い異質性が観察された（図7）。また、サンプル数が多いとはいえないことを考慮し、エビデンスの強さは“中(B)”とした。

アウトカム3：倦怠感

倦怠感における評価指標は、POMS, PFS, FACIT-FS, FACT-F, VAS, FSS, SCFS, Fatigue scaleが含まれ、評価尺度を統合したもので評価した。倦怠感を評価したランダム化比較試験12件でメタアナリシスを行った結果、身体活動・運動介入による倦怠感是对照群と比較して有意に改善する（SMD -0.30, 95%信頼区間 -0.53~-0.08）ことが認められた。ただし、バイアスリスク評価の結果が中等度であり、メタアナリシスの結果よりI²は56%と研究間で異質性が観察された（図8）。また、サンプル数が多いとはいえず、尺度の統一性が低いことを考慮し、エビデンスの強さは“中(B)”とした。

アウトカム4：うつ

うつにおける評価指標は、BDI-II, CES-D, HADSが含まれ、評価尺度を統合したもので評価した。うつを評価したランダム化比較試験4件でメタアナリシスを行った結果、身体活動・運動介入によるうつは対照群と比較して有意に改善

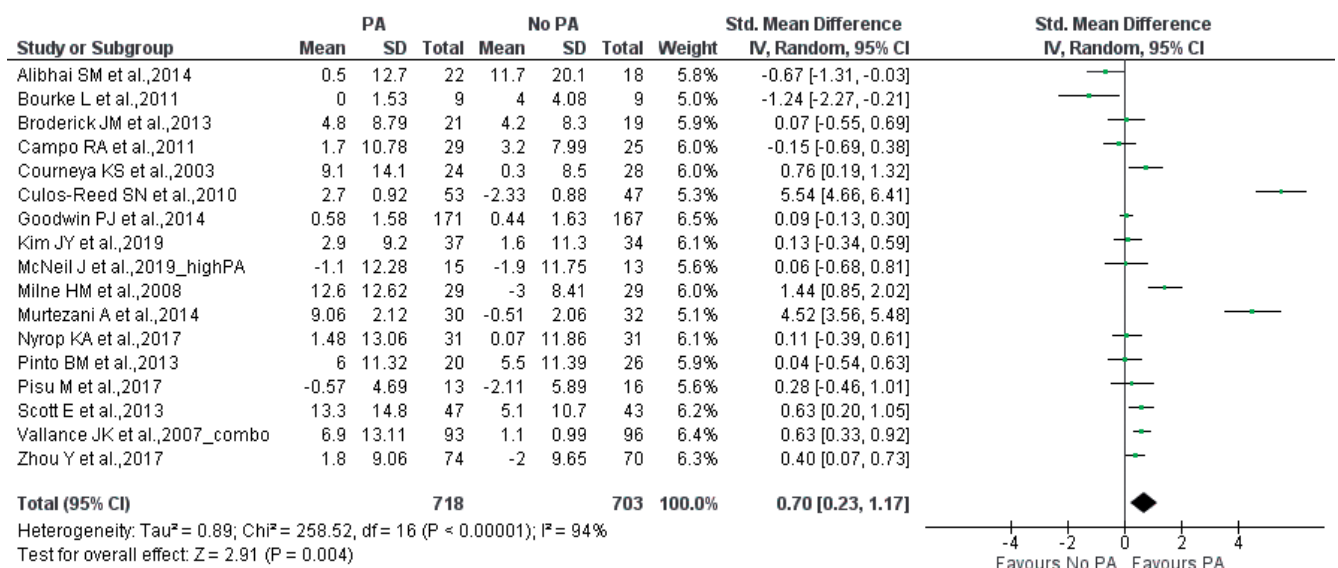


図7 運動介入と健康関連QoLに関するメタアナリシス結果

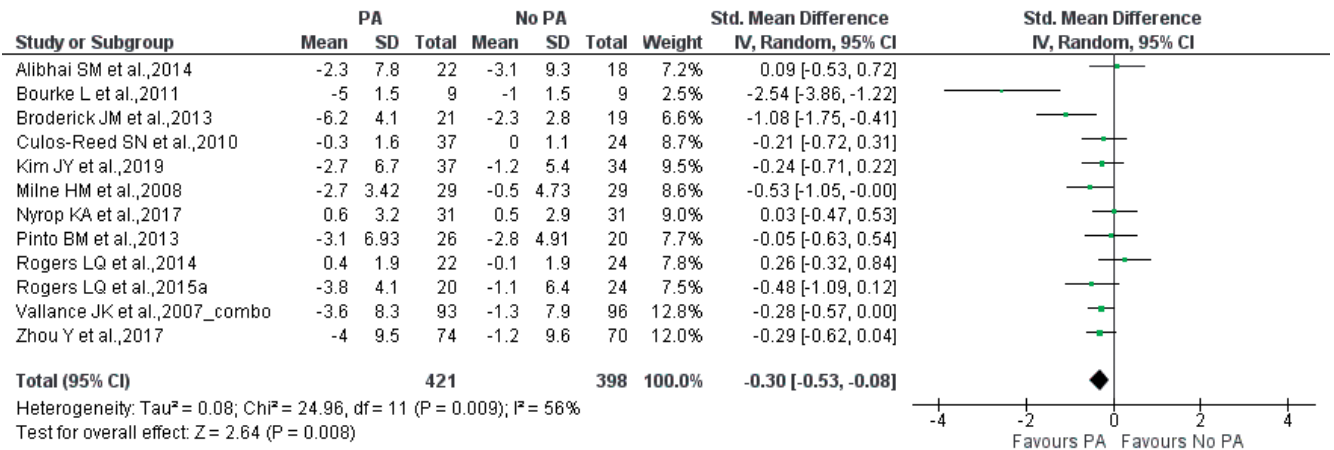


図8 運動介入と倦怠感に関するメタアナリシス結果

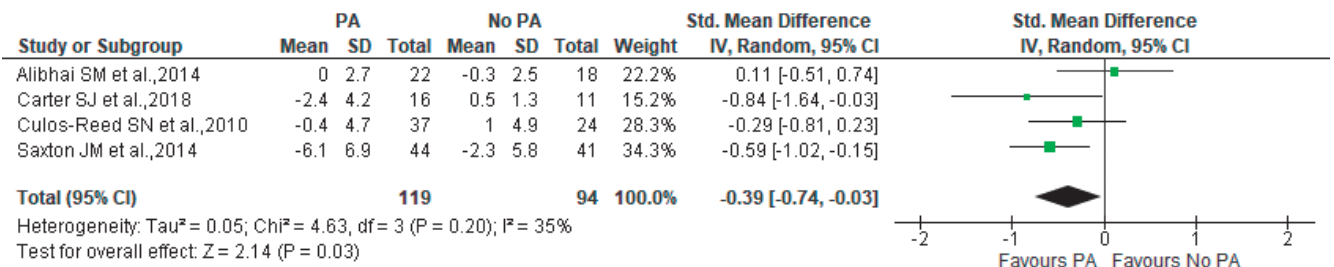


図9 運動介入とうつに関するメタアナリシス結果

する (SMD -0.39, 95%信頼区間 -0.74~-0.03) ことが認められた。また、メタアナリシスの結果よりI²は35%と研究間の異質性が低いことが観察された (図9)。ただし、バイアスリスク評価の結果が中等度であること、サンプル数が乏しいこと、尺度の統一性が低いことを考慮し、エビデンスの強さは“弱(C)”とした。

アウトカム5：認知機能

認知機能における評価指標は、FACT-Cog PCIで評価されたものを採用した。認知機能を評価したランダム化比較試験は1件のみ抽出されたため、メタアナリシスを行わなかった。参考値として、対象論文となった1件の研究結果、身体活動介入群の認知機能は対照群と比べて有意な改善が認められた (p=0.01)。バイアスリスク評価の結果ならびに対象研究数が1件のみであったため、エビデンスの強さは“とても弱い(D)”とした。

アウトカム6：ADL

ADLにおける評価指標は、DRI sum scoreで評価されたものを採用した。ADLを評価したランダム化比較試験は1件のみ抽出されたため、メタアナリシスを行わなかった。参考値として、対象論文となった1件の研究結果、身体活動介入群のADLは対照群と比べて有意な改善が認められた (p=0.041)。バイアスリスク評価の結果ならびに対象研究数が1件のみであったため、エビデンスの強さは“とても弱い(D)”とした。

アウトカム7：運動関連有害事象

運動関連有害事象は、各研究で研究参加者の何名に有害事象が発生したか報告されている文献に限り採用した。運動関連有害事象を評価したランダム化比較試験19件でメタアナリシスを行った結果、身体活動・運動介入による有害事象発生の相対リスクは対照群と比較して有意に多い (RR 2.77, 95%信頼区間 1.72~4.47) ことが認められた。また、メタアナリシスの結果よりI²は16%と研究間の異質性が低いことが観察された (図10)。ただし、バイアスリスク評価の結果が中等度であること、サンプル数が多いとはいえないことを考慮し、エビデンスの強さは“中(B)”とした。運動関連有害事象

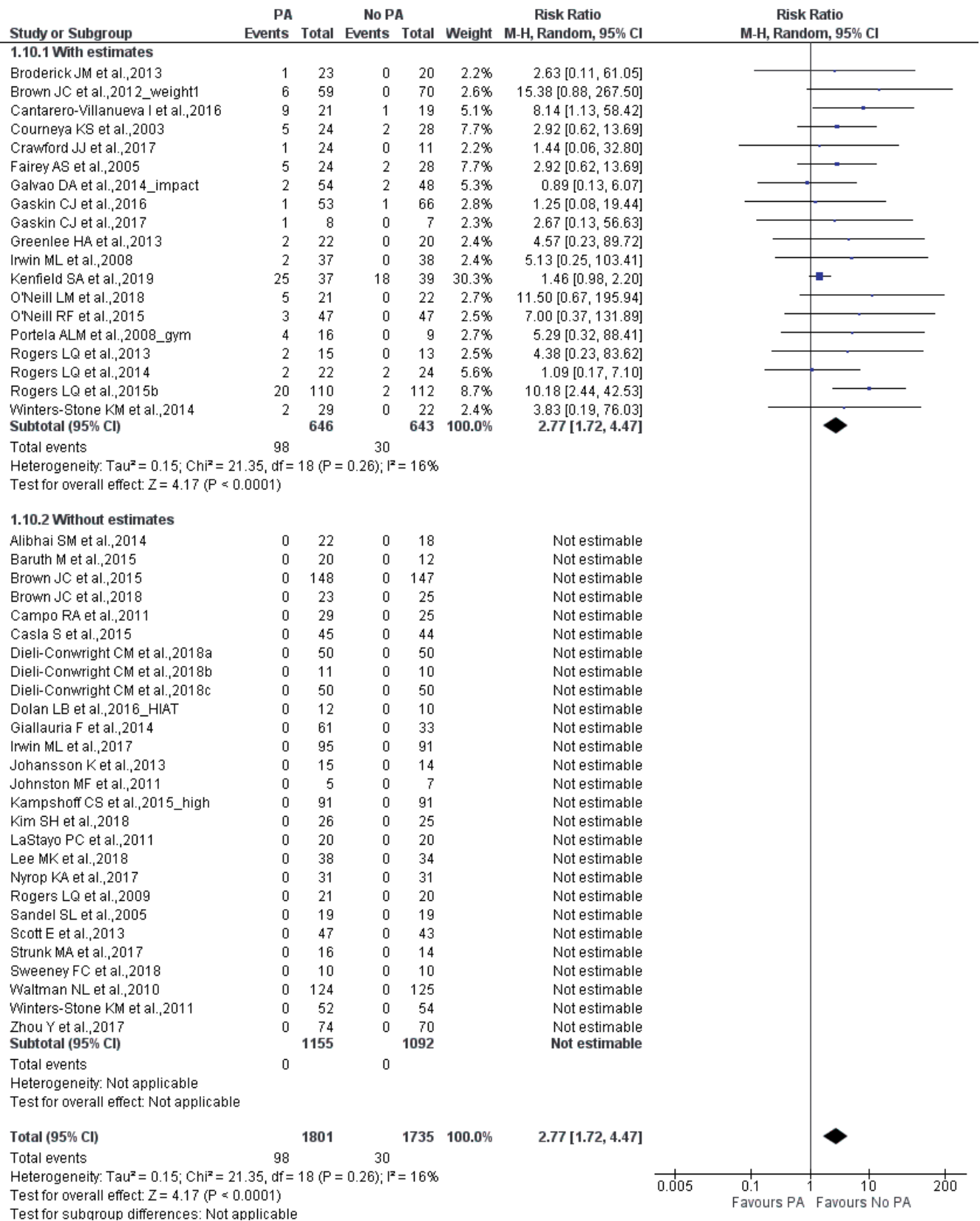


図10 運動介入と運動関連有害事象に関するメタアナリシス結果

の発生は、運動介入による筋肉痛などの報告が含まれるため、非介入と比較すると発生割合が高い結果となった。これは、文献中で介入群についてのみ記載されている場合に、非介入群の有害事象は考慮していない可能性がある。

有害事象を運動関連有害事象と規定するのであれば、非介入では運動を実施しないことから有害事象の発生割合が0となる。筋肉痛などの報告を運動関連有害事象と規定する以上、運動を実施しない場合より、運動を実施した場合に有害事象が起こることは当然となるが、内訳に運動を実施したことによる死亡、心血管イベントなどの重篤な有害事象は含まれなかった。

論文内に「有害事象の発生は無かった」と記載された研究を上述の結果と合わせると47件の研究で有害事象の発生の有無が報告され、そのほとんどで有害事象の発生は確認されなかった。

〈推奨とエビデンスの強さ〉

推奨の作成にあたって、アウトカムの重要性は健康関連QoLが8点（エビデンスの強さ「B」）、倦怠感が7点（エビデンスの強さ「B」）となった。重要性の高いアウトカムについてのエビデンスの強さに基づき、エビデンスの確実性（強さ）はB（中）とした。推奨決定のためのパネル会議では、エビデンスの強さに加えて、益と害のバランス評価、患者の価値観、患者への負担、システマティックレビューの対象研究のバイアスリスクについて主に議論がなされた。益と害のバランス評価について、「益」のアウトカムは、運動による健康関連QoL、倦怠感の改善を重要視した。「害」は心血管イベントを含む有害事象であった。内訳としては、重篤な有害事象はほとんど無く、運動により通常生じるような有害事象であった。運動を実施したことによる死亡、心血管イベントなどの有害事象は無かった。観察された運動に伴う有害事象による望ましくない効果に照らし合わせて、健康関連QoL、倦怠感による望ましい効果が上回ると考えられる。重大と判断したアウトカムに置く価値の大きさや、運動に対する患者の好みや価値観は、大きくばらつきがあると考えられる。患者への負担については、運動自体には経済的な負担はないが、安全かつ有効な実践には高額ではないが経済的な負担が生じる。投票の結果、推奨の強さは、10名中1名が「運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることを推奨する」、9名が「運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることを提案する」に投票し、90%の合意をもって、「運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることを提案する」に決定した。

以上から、本CQに対する推奨とエビデンスの強さは、「運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることを提案する。推奨の強さ：弱、エビデンスの確実性（強さ）：B（中）」とした。

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4. 今後の研究

本ガイドラインにおいては、定義されるがんサバイバー（18歳以降にがんと診断され、がんが治癒しているか、安定している人）に対する運動介入研究のシステマティックレビューを行った結果、有害事象報告が少なかったことを強調したい。一方で、65歳以上の高齢者のみを対象とした研究が少ないことは限界点として挙げられる。本ガイドライン作成の過程で実施したシステマティックレビューならびにメタアナリシスにおける対象者は、年齢を明確に65歳未満/65歳以上と区分していない。本ガイドラインにおいては、上記の限界点を踏まえた上で益と害のバランスを検討し、推奨を作成した。

米国では、高齢者の機能評価が重要であると認識されているが、日本においてはこれから高齢者の機能評価を行っていく段階である。また、後期高齢者についてはフレイル健診が始まったが、健診の実施は各自治体に任せられている。現段階では、高齢者に対する特別な制度は存在しないため、各個人が身体活動・運動に取り組みやすい環境を整備することが必要である。

また、「がん薬物療法施行中の人（ただし、血液がんの維持目的の化学療法や乳がん、前立腺がんなどにおける再発予防のホルモン療法は除く）、がん再発、転移治療中ならびに終末期の人」については、本ガイドラインでカバーしない範囲である。一方、今回カバーしない範囲となった対象に対する身体活動・運動研究のエビデンスの整理をすることは重要であるため、今後の検討課題としたい。

本ガイドラインでは、がんサバイバーに対して臨床現場で医療従事者が運動を勧めることに対する推奨を作成した。従って、具体的にどのような運動を実施することが望ましいかを提案するに至らなかった。次回のガイドライン改訂時には、具体的な運動種目や運動強度、運動時間、実施頻度に言及されることが望ましい。

また、がん種別、65歳未満/65歳以上、前期高齢者/後期高齢者の研究を明確に区分する、アジア人を対象とした研究に絞る、監視下/非監視下における介入、運動習慣の有無など、サブグループ解析が必要な事柄について検討したい。

今回のガイドラインでは、参考として、本ガイドラインの推奨とは別に、システマティックレビューで対象となった研究について有酸素性運動、筋力トレーニング、有酸素性運動と筋力トレーニングの組み合わせ、その他（ラジオ体操、気功、太極拳、ガーデニング、グループエクササイズ、日常生活の中で身体を動かす、ヨガなど）に分類し、サブグループ解析を行った。その結果を以下に記す。

〈サブグループ解析1〉

運動習慣のない18～64歳のがんサバイバーを対象とした研究について、運動種別に各アウトカムに対する効果を検討した。

1) 有酸素性運動

● 持久性体力

持久性体力を評価したランダム化比較試験15件でメタアナリシスを行った結果、身体活動・運動介入による持久性体力は対照群と比較して有意に改善する（SMD 0.64, 95%信頼区間 0.29～0.98）ことが認められた。ただし、メタアナリシスの結果より I^2 は76%と研究間で高い異質性が観察された。

● 筋力

筋力を評価したランダム化比較試験8件でメタアナリシスを行った結果、身体活動・運動介入による筋力は対照群と比較して有意に改善する（SMD 0.76, 95%信頼区間 0.12～1.39）ことが認められた。ただし、メタアナリシスの結果より I^2 は82%と研究間で高い異質性が観察された。

● 健康関連QoL

健康関連QoLを評価したランダム化比較試験13件でメタアナリシスを行った結果、身体活動・運動介入による健康関連QoLは対照群と比較して有意に改善する（SMD 0.53, 95%信頼区間 0.13～0.93）ことが認められた。ただし、メタアナリシスの結果より I^2 は90%と研究間で高い異質性が観察された。

●倦怠感

倦怠感を評価したランダム化比較試験15件でメタアナリシスを行った結果、身体活動・運動介入による倦怠感は対照群と比較して有意に改善する（SMD -0.56, 95%信頼区間 -0.83~-0.29）ことが認められた。ただし、メタアナリシスの結果よりI²は73%と研究間で高い異質性が観察された。

●うつ

うつを評価したランダム化比較試験4件でメタアナリシスを行った結果、身体活動・運動介入によるうつは対照群と比較して有意に改善する（SMD -0.42, 95%信頼区間 -0.82~-0.03）ことが認められた。また、メタアナリシスの結果よりI²は32%と研究間の異質性が低いことが観察された。

●運動関連有害事象

運動関連有害事象は、各研究で研究参加者の何名に有害事象が発生したか報告されている文献に限り採用した。運動関連有害事象を評価したランダム化比較試験17件でメタアナリシスを行った結果、身体活動・運動介入による有害事象発生の相対リスクは対照群と比較して有意に高い（RR 2.90, 95%信頼区間 1.73~4.84）ことが認められた。また、メタアナリシスの結果よりI²は21%と研究間の異質性が低いことが観察された。

2) 筋力トレーニング

●持久性体力

持久性体力を評価したランダム化比較試験7件でメタアナリシスを行った結果、身体活動・運動介入による持久性体力は対照群と比較して有意に改善する（SMD 0.44, 95%信頼区間 0.08~0.80）ことが認められた。ただし、メタアナリシスの結果よりI²は53%と研究間で高い異質性が観察された。

●筋力

筋力を評価したランダム化比較試験6件でメタアナリシスを行った結果、身体活動・運動介入による筋力は対照群と比較して有意な差は認められなかった（SMD 0.57, 95%信頼区間 -0.23~1.38）。

●健康関連QoL

健康関連QoLを評価したランダム化比較試験5件でメタアナリシスを行った結果、身体活動・運動介入による健康関連QoLは対照群と比較して有意な差は認められなかった（SMD 0.14, 95%信頼区間 -0.65~0.92）。

●倦怠感

倦怠感を評価したランダム化比較試験8件でメタアナリシスを行った結果、身体活動・運動介入による倦怠感は対照群と比較して有意に改善する（SMD -0.55, 95%信頼区間 -0.97~-0.14）ことが認められた。ただし、バイアスリスク評価の結果が中等度であり、メタアナリシスの結果よりI²は76%と研究間で高い異質性が観察された。

●うつ

うつを評価したランダム化比較試験2件でメタアナリシスを行った結果、身体活動・運動介入によるうつは対照群と比較して有意な差は認められなかった（SMD -0.28, 95%信頼区間 -0.96~0.41）。

●運動関連有害事象

運動関連有害事象は、各研究で研究参加者の何名に有害事象が発生したか報告されている文献に限り採用した。運動関連有害事象を評価したランダム化比較試験11件でメタアナリシスを行った結果、身体活動・運動介入による有害事象発生の相対リスクは対照群と比較して有意に高い（RR 1.69, 95%信頼区間 1.16~2.46）ことが認められた。また、メタアナリシスの結果よりI²は0%と研究間の異質性が低いことが観察された。

3) 有酸素性運動と筋力トレーニングの組み合わせ

● 持久性体力

持久性体力を評価したランダム化比較試験7件でメタアナリシスを行った結果、身体活動・運動介入による持久性体力は対照群と比較して有意に改善する (SMD 0.44, 95%信頼区間 0.08~0.80) ことが認められた。ただし、メタアナリシスの結果より I^2 は53%と研究間で高い異質性が観察された。

● 筋力

筋力を評価したランダム化比較試験6件でメタアナリシスを行った結果、身体活動・運動介入による筋力は対照群と比較して有意な差は認められなかった (SMD 0.57, 95%信頼区間 -0.23~1.38)。

● 健康関連QoL

健康関連QoLを評価したランダム化比較試験5件でメタアナリシスを行った結果、身体活動・運動介入による健康関連QoLは対照群と比較して有意な差は認められなかった (SMD 0.14, 95%信頼区間 -0.65~0.92)。

● 倦怠感

倦怠感を評価したランダム化比較試験8件でメタアナリシスを行った結果、身体活動・運動介入による倦怠感は対照群と比較して有意に改善する (SMD -0.55, 95%信頼区間 -0.97~-0.14) ことが認められた。ただし、メタアナリシスの結果より I^2 は76%と研究間で高い異質性が観察された。

● うつ

うつを評価したランダム化比較試験2件でメタアナリシスを行った結果、身体活動・運動介入によるうつは対照群と比較して有意な差は認められなかった (SMD -0.28, 95%信頼区間 -0.96~0.41)。

● 運動関連有害事象

運動関連有害事象は、各研究で研究参加者の何名に有害事象が発生したか報告されている文献に限り採用した。運動関連有害事象を評価したランダム化比較試験9件でメタアナリシスを行った結果、身体活動・運動介入による有害事象発生の相対リスクは対照群と比較して有意に高い (RR 1.59, 95%信頼区間 1.10~2.30) ことが認められた。また、メタアナリシスの結果より I^2 は0%と研究間の異質性が低いことが観察された。

4) その他(ラジオ体操, 気功, 太極拳, ガーデニング, グループエクササイズ, 日常生活の中で身体を動かす, ヨガなど)

● 持久性体力

持久性体力を評価したランダム化比較試験4件でメタアナリシスを行った結果、身体活動・運動介入による持久性体力は対照群と比較して有意な差は認められなかった (SMD 0.58, 95%信頼区間 -0.03~1.20)。

● 筋力

筋力を評価したランダム化比較試験2件でメタアナリシスを行った結果、身体活動・運動介入による筋力は対照群と比較して有意に改善する (SMD 1.68, 95%信頼区間 0.44~2.91) ことが認められた。ただし、メタアナリシスの結果より I^2 は82%と研究間で高い異質性が観察された。

● 健康関連QoL

健康関連QoLを評価したランダム化比較試験6件でメタアナリシスを行った結果、身体活動・運動介入による健康関連QoLは対照群と比較して有意な差は認められなかった (SMD 1.03, 95%信頼区間 -0.17~2.23)。

●倦怠感

倦怠感を評価したランダム化比較試験3件でメタアナリシスを行った結果、身体活動・運動介入による倦怠感是对照群と比較して有意な差は認められなかった (SMD -0.23, 95%信頼区間 -0.46~-0.00)。

●うつ

うつを評価したランダム化比較試験は1件のみ抽出されたため、メタアナリシスを行わなかった。

●運動関連有害事象

運動関連有害事象は、各研究で研究参加者の何名に有害事象が発生したか報告されている文献に限り採用した。運動関連有害事象を評価したランダム化比較試験3件でメタアナリシスを行った結果、身体活動・運動介入による有害事象発生の相対リスクは対照群と比較して有意に高い (RR 3.10, 95%信頼区間 0.54~17.88) ことが認められた。また、メタアナリシスの結果よりI²は0%と研究間の異質性が低いことが観察された。

〈サブグループ解析2〉

運動習慣のない65歳以上のがんサバイバーを対象とした研究について、運動種別に各アウトカムに対する効果を検討した。

1) 有酸素性運動

●健康関連QoL

健康関連QoLを評価したランダム化比較試験12件でメタアナリシスを行った結果、身体活動・運動介入による健康関連QoLは対照群と比較して有意に改善する (SMD 0.51, 95%信頼区間 0.09~0.94) ことが認められた。ただし、メタアナリシスの結果よりI²は91%と研究間で高い異質性が観察された。

●倦怠感

倦怠感を評価したランダム化比較試験10件でメタアナリシスを行った結果、身体活動・運動介入による倦怠感是对照群と比較して有意に改善する (SMD -0.35, 95%信頼区間 -0.62~-0.08) ことが認められた。ただし、メタアナリシスの結果よりI²は63%と研究間で異質性が観察された。

●うつ

うつを評価したランダム化比較試験3件でメタアナリシスを行った結果、身体活動・運動介入によるうつは対照群と比較して有意な差は認められなかった (SMD -0.42, 95%信頼区間 -0.94~0.10)。

●認知機能

認知機能を評価したランダム化比較試験は1件のみ抽出されたため、メタアナリシスを行わなかった。

●ADL

ADLを評価したランダム化比較試験は抽出されなかった。

●運動関連有害事象

運動関連有害事象は、各研究で研究参加者の何名に有害事象が発生したか報告されている文献に限り採用した。運動関連有害事象を評価したランダム化比較試験15件でメタアナリシスを行った結果、身体活動・運動介入による有害事象発生の相対リスクは対照群と比較して有意に高い (RR 2.79, 95%信頼区間 1.62~4.80) ことが認められた。また、メタアナリシスの結果よりI²は24%と研究間の異質性が低いことが観察された。

2) 筋力トレーニング

●健康関連QoL

健康関連QoLを評価したランダム化比較試験4件でメタアナリシスを行った結果、身体活動・運動介入による健康関連QoLは対照群と比較して有意な差は認められなかった (SMD -0.04, 95%信頼区間 -1.07~1.00)。

●倦怠感

倦怠感を評価したランダム化比較試験6件でメタアナリシスを行った結果、身体活動・運動介入による倦怠感是对照群と比較して有意な差は認められなかった (SMD -0.38, 95%信頼区間 -0.85~0.09)。

●うつ

うつを評価したランダム化比較試験2件でメタアナリシスを行った結果、身体活動・運動介入によるうつは対照群と比較して有意な差は認められなかった (SMD -0.28, 95%信頼区間 -0.96~0.41)。

●認知機能

認知機能を評価したランダム化比較試験は抽出されなかった。

●ADL

ADLを評価したランダム化比較試験は1件のみ抽出されたため、メタアナリシスを行わなかった。

●運動関連有害事象

運動関連有害事象は、各研究で研究参加者の何名に有害事象が発生したか報告されている文献に限り採用した。運動関連有害事象を評価したランダム化比較試験10件でメタアナリシスを行った結果、身体活動・運動介入による有害事象発生の相対リスクは対照群と比較して有意に高い (RR 1.64, 95%信頼区間 1.13~2.36) ことが認められた。また、メタアナリシスの結果より I^2 は0%と研究間の異質性が低いことが観察された。

3) 有酸素性運動と筋力トレーニングの組み合わせ

●健康関連QoL

健康関連QoLを評価したランダム化比較試験4件でメタアナリシスを行った結果、身体活動・運動介入による健康関連QoLは対照群と比較して有意な差は認められなかった (SMD -0.04, 95%信頼区間 -1.07~1.00)。

●倦怠感

倦怠感を評価したランダム化比較試験6件でメタアナリシスを行った結果、身体活動・運動介入による倦怠感是对照群と比較して有意な差は認められなかった (SMD -0.38, 95%信頼区間 -0.85~0.09)。

●うつ

うつを評価したランダム化比較試験2件でメタアナリシスを行った結果、身体活動・運動介入によるうつは対照群と比較して有意な差は認められなかった (SMD -0.28, 95%信頼区間 -0.96~0.41)。

●認知機能

認知機能を評価したランダム化比較試験は抽出されなかった。

●ADL

ADLを評価したランダム化比較試験は抽出されなかった。

●運動関連有害事象

運動関連有害事象は、各研究で研究参加者の何名に有害事象が発生したか報告されている文献に限り採用した。運動関連有害事象を評価したランダム化比較試験7件でメタアナリシスを行った結果、身体活動・運動介入による有害事象発生の相対リスクは対照群と比較して有意に高い (RR 2.12, 95%信頼区間 0.84~5.35) ことが認められた。また、メタアナリシスの結果よりI²は0%と研究間の異質性が低いことが観察された。

4) その他(ラジオ体操, 気功, 太極拳, ガーデニング, グループエクササイズ, 日常生活の中で身体を動かす, ヨガなど)

●健康関連QoL

健康関連QoLを評価したランダム化比較試験6件でメタアナリシスを行った結果、身体活動・運動介入による健康関連QoLは対照群と比較して有意な差は認められなかった (SMD 1.03, 95%信頼区間 -0.17~2.23)。

●倦怠感

倦怠感を評価したランダム化比較試験3件でメタアナリシスを行った結果、身体活動・運動介入による倦怠感是对照群と比較して有意な差は認められなかった (SMD -0.23, 95%信頼区間 -0.46~-0.00)。

●うつ

うつを評価したランダム化比較試験は1件のみ抽出されたため、メタアナリシスを行わなかった。

●認知機能

認知機能を評価したランダム化比較試験は抽出されなかった。

●ADL

ADLを評価したランダム化比較試験は抽出されなかった。

●運動関連有害事象

運動関連有害事象は、各研究で研究参加者の何名に有害事象が発生したか報告されている文献に限り採用した。運動関連有害事象を評価したランダム化比較試験2件でメタアナリシスを行った結果、身体活動・運動介入による有害事象発生の相対リスクは対照群と比較して有意に高い (RR 1.97, 95%信頼区間 0.22~17.54) ことが認められた。また、メタアナリシスの結果よりI²は0%と研究間の異質性が低いことが観察された。

《付 録》

■CQの設定

◎クリニカルクエスションの設定

スコープで取り上げた重要臨床課題 (Key Clinical Issue)

運動をしていない人に運動を勧めるとき
 問診で運動習慣があるかないかを尋ねる
 運動習慣 EIMの定義 (ACSM)
 問1 中強度以上の運動を1週間に何日しますか (早歩きなど)
 問2 その運動を1日あたり何分しますか
 問1の回答×問2の回答が150分以上

CQの構成要素

P (Patients, Problem, Population)

| | |
|-------|----------------------------------|
| 性別 | 指定なし |
| 年齢 | 18～64歳 |
| 疾患・病態 | 18歳以降にがんと診断され、がんが治癒しているか、安定している。 |
| 地理的要件 | 特になし |
| その他 | 特になし |

I (Interventions) / C (Comparisons, Controls) のリスト

運動推奨あり/なし

O (Outcomes) のリスト

| | Outcomeの内容 | 益か害か | 重要度 | 採用可否 |
|----|------------|------|-----|------|
| 01 | 生存期間 | 益 | 8点 | ○ |
| 02 | 持久性体力 | 益 | 7点 | ○ |
| 03 | 筋力 | 益 | 6点 | ○ |
| 04 | QOL | 益 | 7点 | ○ |
| 05 | がん関連倦怠感 | 益 | 6点 | ○ |
| 06 | 運動関連有害事象 | 害 | 6点 | ○ |
| 07 | うつ | 益 | 6点 | ○ |

作成したCQ

運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？

◎クリニカルクエスチョンの設定

スコープで取り上げた重要臨床課題 (Key Clinical Issue)

運動をしていない人に運動を勧めるとき
 問診で運動習慣があるかないかを尋ねる
 運動習慣 EIMの定義 (ACSM)
 問1 中強度以上の運動を1週間に何日しますか (早歩きなど)
 問2 その運動を1日あたり何分しますか
 問1の回答×問2の回答が150分以上

CQの構成要素

P (Patients, Problem, Population)

| | |
|-------|----------------------------------|
| 性別 | 指定なし |
| 年齢 | 65歳以上 |
| 疾患・病態 | 18歳以降にがんと診断され、がんが治癒しているか、安定している。 |
| 地理的要件 | 特になし |
| その他 | 特になし |

I (Interventions) / C (Comparisons, Controls) のリスト

運動推奨あり/なし

O (Outcomes) のリスト

| | Outcomeの内容 | 益か害か | 重要度 | 採用可否 |
|-----|------------|------|-----|------|
| O1 | 生存期間 | 益 | 8点 | ○ |
| O2 | 持久性体力 | 益 | 6点 | × |
| O3 | 筋力 | 益 | 6点 | × |
| O4 | QOL | 益 | 8点 | ○ |
| O5 | がん関連倦怠感 | 益 | 6点 | ○ |
| O6 | 運動関連有害事象 | 害 | 6点 | ○ |
| O7 | うつ | 益 | 6点 | ○ |
| O8 | 認知機能 | 益 | 6点 | ○ |
| O9 | 運動時以外の転倒 | 益 | 6点 | × |
| O10 | ADL | 益 | 7点 | ○ |

作成したCQ

運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？

■すべての文献検索データベースごとの検索式とフローチャートと文献

◎データベース検索結果

| | |
|--------|---|
| タイトル | 「がんサバイバーシップガイドライン 国立がん研究センター編」(Cancer survivorship guideline, National Cancer Center Japan edition) 身体活動・運動編 |
| CQ | 運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？ |
| データベース | PubMed |
| 日付 | 2019/09/30 |
| 検索者 | 国立がん研究センター図書館 加藤恵子 |

| # | 検索式 | 文献数 |
|-----|---|------------|
| #1 | Neoplasms[Mesh] | 3,242,607 |
| #2 | Cancer[TIAB] | 1,634,586 |
| #3 | Tumor[TIAB] | 1,109,167 |
| #4 | #1 OR #2 OR #3 | 3,912,877 |
| #5 | Exercise[Mesh] | 185,841 |
| #6 | Exercise therapy[Mesh] | 48,153 |
| #7 | #5 OR #6 | 216,516 |
| #8 | Survivor[Mesh] | 29,304 |
| #9 | surviv*[TIAB] | 109,137 |
| #10 | #8 OR #9 | 1,098,136 |
| #11 | #4 AND #7 AND #10 | 2,076 |
| #12 | randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR placebo[tiab] OR drug therapy[sh] OR randomly[tiab] OR trial[tiab] OR groups[tiab] NOT (animals [mh] NOT humans [mh]) | 4,205,475 |
| #13 | 1966:2019/0/9/30[EDAT] | 27,696,875 |
| #14 | English[LA] OR Japanese[LA] | 26,102,289 |
| #15 | #11 AND #12 AND #13 AND #14 | 1,022 |
| #16 | #15 AND Filters: Adult: 19-44 years; Middle Aged: 45-64 years | 706 |

◎データベース検索結果

| | |
|--------|---|
| タイトル | 「がんサバイバーシップガイドライン 国立がん研究センター編」(Cancer survivorship guideline, National Cancer Center Japan edition) 身体活動・運動編 |
| CQ | 運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？ |
| データベース | Cochran |
| 日付 | 2019/09/30 |
| 検索者 | 国立がん研究センター図書館 加藤恵子 |

| # | 検索式 | 文献数 |
|-----|---|---------|
| #1 | MeSH descriptor: [Neoplasms] explode all trees | 71,857 |
| #2 | (Cancer) :ti,ab,kw | 149,364 |
| #3 | (neoplas*) :ti,ab,kw | 75,957 |
| #4 | (Tumor*) :ti,ab,kw | 63,216 |
| #5 | (Tumour*) :ti,ab,kw | 11,792 |
| #6 | #1 or #2 or #3 or #4 or #5 | 199,837 |
| #7 | MeSH descriptor: [Exercise] explode all trees | 22,510 |
| #8 | MeSH descriptor: [Exercise Therapy] explode all trees | 12,379 |
| #9 | (physical activity) :ti,ab,kw | 34,948 |
| #10 | (Exercise) :ti,ab,kw | 83,563 |
| #11 | #7 or #8 or #9 or #10 | 105,733 |
| #12 | MeSH descriptor: [Survivors] explode all trees | 1,341 |
| #13 | (surviv*) :ti,ab,kw | 109,893 |
| #14 | #12 or #13 | 109,893 |
| #15 | #6 and #11 and #14 | 1,978 |
| #16 | MeSH descriptor: [Adult] explode all trees | 3,404 |
| #17 | (adult*) :ti,ab,kw | 608,438 |
| #18 | #16 or #17 | 609,209 |
| #19 | #15 and #18 with Publication Year to 2019, in Trials | 845 |
| #20 | #19 not pubmed:an | 369 |

◎データベース検索結果

| | |
|--------|---|
| タイトル | 「がんサバイバーシップガイドライン 国立がん研究センター編」(Cancer survivorship guideline, National Cancer Center Japan edition) 身体活動・運動編 |
| CQ | 運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？ |
| データベース | 医中誌 |
| 日付 | 2019/09/30 |
| 検索者 | 国立がん研究センター図書館 加藤恵子 |

| # | 検索式 | 文献数 |
|----|--|-----------|
| #1 | (癌サバイバー/TH or サバイバー/AL) | 1,587 |
| #2 | がん患者/AL | 25,024 |
| #3 | #1 OR #2 | 26,303 |
| #4 | (身体運動/TH or 運動/AL) | 378,130 |
| #5 | #3 AND #4 | 534 |
| #6 | (#5) and (PT=会議録除く CK=成人 (19～44) ,中年 (45～64)) | 92 |
| #1 | (腫瘍/TH or がん/AL) | 2,170,732 |
| #2 | (身体運動/TH or 運動/AL) | 378,130 |
| #3 | #1 and #2 | 15,882 |
| #4 | (#3) and (RD=ランダム化比較試験,準ランダム化比較試験 CK=成人 (19～44) ,中年 (45～64)) | 31 |
| #5 | (#4) and (PT=会議録除く) | 31 |

◎データベース検索結果

| | |
|--------|---|
| タイトル | 「がんサバイバーシップガイドライン 国立がん研究センター編」(Cancer survivorship guideline, National Cancer Center Japan edition) 身体活動・運動編 |
| CQ | 運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？ |
| データベース | SPORTDiscus |
| 日付 | 2019/09/30 |
| 検索者 | 筑波大学附属図書館 医学図書館 |

| # | 検索式 | 文献数 |
|-----|--|-----------|
| #1 | DE "TUMORS" | 2,320 |
| #2 | TI cancer OR AB cancer | 20,339 |
| #3 | TI tumor OR AB tumor | 5,846 |
| #4 | (DE "TUMORS") OR ((TI cancer) OR (AB cancer)) OR ((TI tumor) OR (AB tumor)) | 24,868 |
| #5 | DE "EXERCISE" | 86,172 |
| #6 | DE "EXERCISE therapy" | 5,747 |
| #7 | (DE "EXERCISE") OR (DE "EXERCISE therapy") | 90,665 |
| #8 | DE "CANCER patients" | 1,866 |
| #9 | TI surviv* OR AB surviv* | 15,587 |
| #10 | (DE "CANCER patients") OR ((TI surviv*) OR (AB surviv*)) | 16,641 |
| #11 | ((DE "EXERCISE") OR (DE "EXERCISE therapy")) AND ((DE "CANCER patients") OR ((TI surviv*) OR (AB surviv*))) AND ((DE "TUMORS") OR ((TI cancer) OR (AB cancer)) OR ((TI tumor) OR (AB tumor))) | 292 |
| #12 | (SU randomized controlled trials OR (TI randomized OR AB randomized) OR (TI placebo OR AB placebo) OR SU drug therapy OR (TI randomly OR AB randomly) OR (TI trial* OR AB trial*) OR (TI group OR AB group)) NOT (SU animal NOT SU human) | 195,800 |
| #13 | 出版日付「1966年1月～2019年9月」 | 2,486,485 |
| #14 | LA English OR LA Japanese | 2,285,727 |
| #15 | ((((DE "EXERCISE") OR (DE "EXERCISE therapy")) AND ((DE "CANCER patients") OR ((TI surviv*) OR (AB surviv*))) AND ((DE "TUMORS") OR ((TI cancer) OR (AB cancer)) OR ((TI tumor) OR (AB tumor)))) AND (SU randomized controlled trials OR (TI randomized OR AB randomized) OR (TI placebo OR AB placebo) OR SU drug therapy OR (TI randomly OR AB randomly) OR (TI trial* OR AB trial*) OR (TI group OR AB group)) AND (LA English OR LA Japanese) +絞り込み 出版日付「1966年1月～2019年9月」 | 87 |

◎データベース検索結果

| | |
|--------|---|
| タイトル | 「がんサバイバーシップガイドライン 国立がん研究センター編」(Cancer survivorship guideline, National Cancer Center Japan edition) 身体活動・運動編 |
| CQ | 運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？ |
| データベース | PubMed |
| 日付 | 2019/09/30 |
| 検索者 | 国立がん研究センター図書館 加藤恵子 |

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| #5 | Exercise[Mesh] | 185,841 |
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| #7 | #5 OR #6 | 216,516 |
| #8 | Survivor[Mesh] | 29,304 |
| #9 | surviv*[TIAB] | 109,137 |
| #10 | #8 OR #9 | 1,098,136 |
| #11 | #4 AND #7 AND #10 | 2,076 |
| #12 | randomized controlled trial[pt] OR controlled clinical trial[pt] OR randomized[tiab] OR placebo[tiab] OR drug therapy[sh] OR randomly[tiab] OR trial[tiab] OR groups[tiab] NOT (animals [mh] NOT humans [mh]) | 4,205,475 |
| #13 | 1966:2019/0/9/30[EDAT] | 27,696,875 |
| #14 | English[LA] OR Japanese[LA] | 26,102,289 |
| #15 | #11 AND #12 AND #13 AND #14 | 1,022 |
| #16 | #15 AND Filters: Aged: 65+ years | 485 |

◎データベース検索結果

| | |
|--------|---|
| タイトル | 「がんサバイバーシップガイドライン 国立がん研究センター編」(Cancer survivorship guideline, National Cancer Center Japan edition) 身体活動・運動編 |
| CQ | 運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？ |
| データベース | Cochran |
| 日付 | 2019/09/30 |
| 検索者 | 国立がん研究センター図書館 加藤恵子 |

| # | 検索式 | 文献数 |
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| #3 | (neoplas*) :ti,ab,kw | 75,957 |
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| #6 | #1 or #2 or #3 or #4 or #5 | 199,837 |
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| #8 | MeSH descriptor: [Exercise Therapy] explode all trees | 12,379 |
| #9 | (physical activity) :ti,ab,kw | 34,948 |
| #10 | (Exercise) :ti,ab,kw | 83,563 |
| #11 | #7 or #8 or #9 or #10 | 105,733 |
| #12 | MeSH descriptor: [Survivors] explode all trees | 1,341 |
| #13 | (surviv*) :ti,ab,kw | 109,893 |
| #14 | #12 or #13 | 109,893 |
| #15 | #6 and #11 and #14 | 1,978 |
| #16 | MeSH descriptor: [Aged] explode all trees | 1,273 |
| #17 | (aged) :ti,ab,kw | 482,206 |
| #18 | #21 or #22 | 482,207 |
| #19 | #15 and #23 with Publication Year to 2019, in Trials | 804 |
| #20 | #24 not pubmed:an | 228 |

◎データベース検索結果

| | |
|--------|---|
| タイトル | 「がんサバイバーシップガイドライン 国立がん研究センター編」(Cancer survivorship guideline, National Cancer Center Japan edition) 身体活動・運動編 |
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| データベース | 医中誌 |
| 日付 | 2019/09/30 |
| 検索者 | 国立がん研究センター図書館 加藤恵子 |

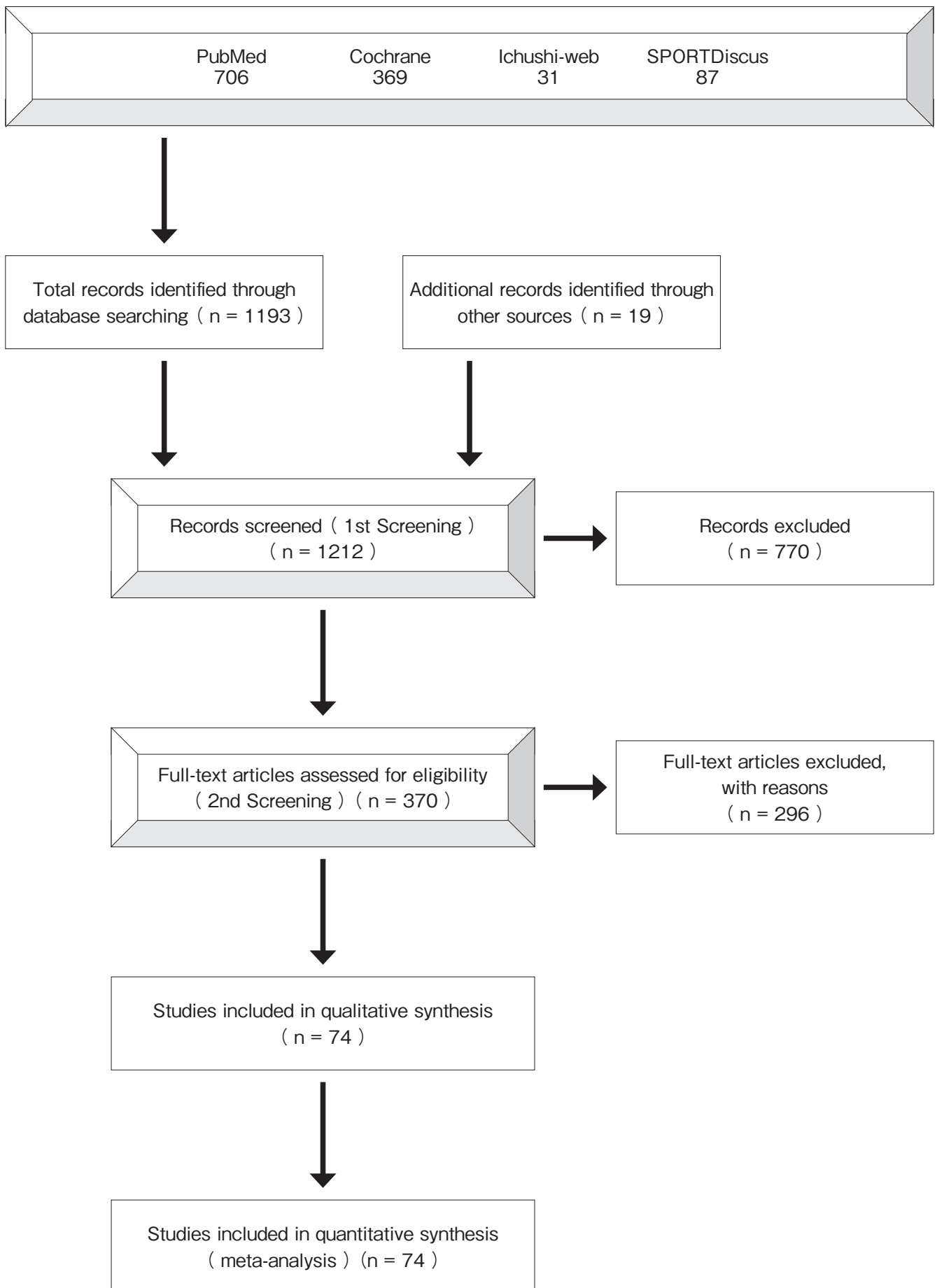
| # | 検索式 | 文献数 |
|----|---|-----------|
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| #5 | #3 AND #4 | 534 |
| #6 | (#5) and (PT=会議録除く CK=高齢者 (65～)) | 25 |
| | | |
| #1 | (腫瘍/TH or がん/AL) | 2,170,732 |
| #2 | (身体運動/TH or 運動/AL) | 378,130 |
| #3 | #1 and #2 | 15,882 |
| #4 | (#3) and (RD=ランダム化比較試験,準ランダム化比較試験 CK=高齢者 (65～)) | 84 |
| #5 | (#4) and (PT=会議録除く) | 84 |

◎データベース検索結果

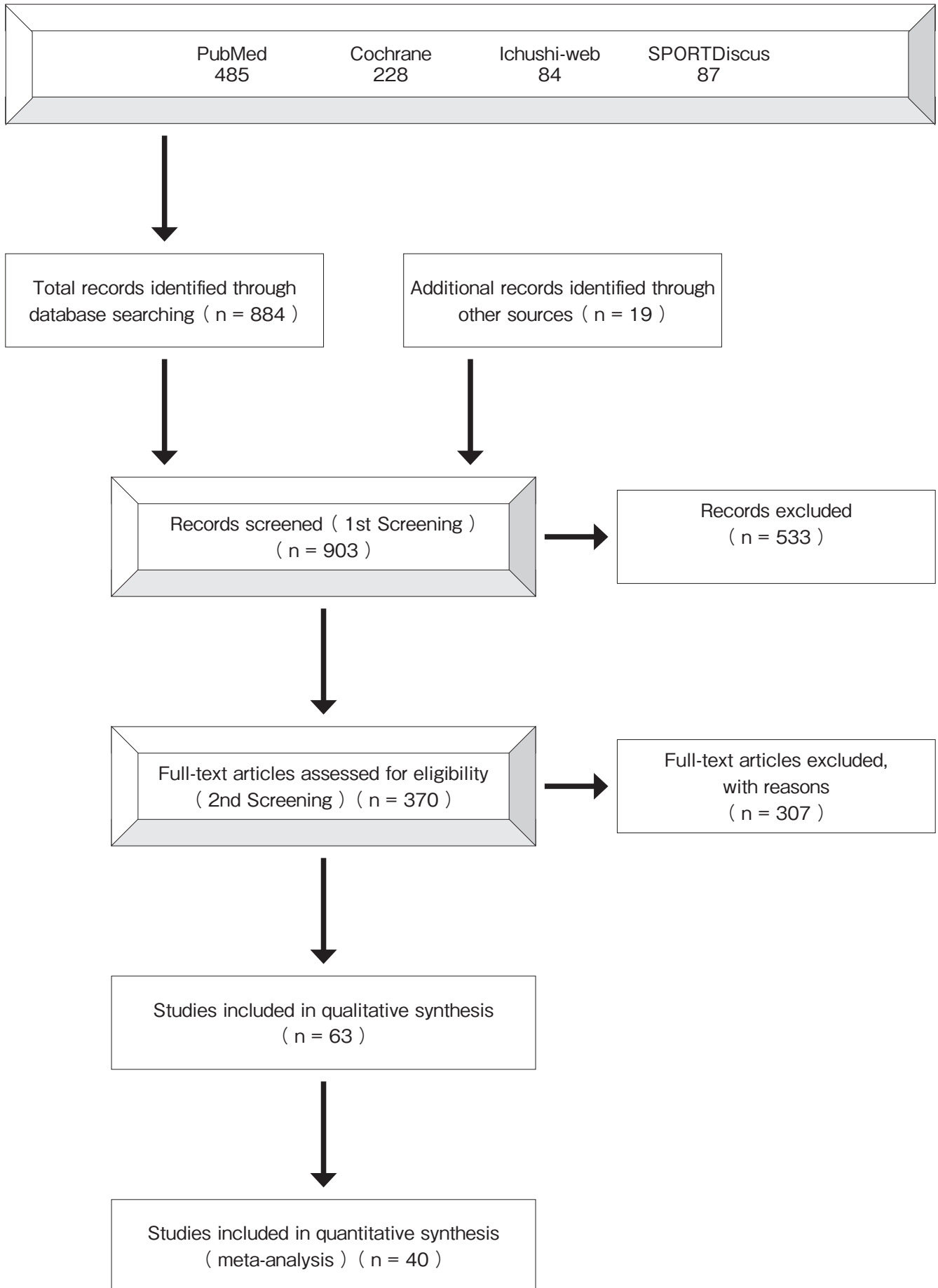
| | |
|--------|---|
| タイトル | 「がんサバイバーシップガイドライン 国立がん研究センター編」(Cancer survivorship guideline, National Cancer Center Japan edition) 身体活動・運動編 |
| CQ | 運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？ |
| データベース | SPORTDiscus |
| 日付 | 2019/09/30 |
| 検索者 | 筑波大学附属図書館 医学図書館 |

| # | 検索式 | 文献数 |
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| #3 | TI tumor OR AB tumor | 5,846 |
| #4 | (DE "TUMORS") OR ((TI cancer) OR (AB cancer)) OR ((TI tumor) OR (AB tumor)) | 24,868 |
| #5 | DE "EXERCISE" | 86,172 |
| #6 | DE "EXERCISE therapy" | 5,747 |
| #7 | (DE "EXERCISE") OR (DE "EXERCISE therapy") | 90,665 |
| #8 | DE "CANCER patients" | 1,866 |
| #9 | TI surviv* OR AB surviv* | 15,587 |
| #10 | (DE "CANCER patients") OR ((TI surviv*) OR (AB surviv*)) | 16,641 |
| #11 | ((DE "EXERCISE") OR (DE "EXERCISE therapy")) AND ((DE "CANCER patients") OR ((TI surviv*) OR (AB surviv*))) AND ((DE "TUMORS") OR ((TI cancer) OR (AB cancer)) OR ((TI tumor) OR (AB tumor))) | 292 |
| #12 | (SU randomized controlled trials OR (TI randomized OR AB randomized) OR (TI placebo OR AB placebo) OR SU drug therapy OR (TI randomly OR AB randomly) OR (TI trial* OR AB trial*) OR (TI group OR AB group)) NOT (SU animal NOT SU human) | 195,800 |
| #13 | 出版日付「1966年1月～2019年9月」 | 2,486,485 |
| #14 | LA English OR LA Japanese | 2,285,727 |
| #15 | ((((DE "EXERCISE") OR (DE "EXERCISE therapy")) AND ((DE "CANCER patients") OR ((TI surviv*) OR (AB surviv*))) AND ((DE "TUMORS") OR ((TI cancer) OR (AB cancer)) OR ((TI tumor) OR (AB tumor)))) AND (SU randomized controlled trials OR (TI randomized OR AB randomized) OR (TI placebo OR AB placebo) OR SU drug therapy OR (TI randomly OR AB randomly) OR (TI trial* OR AB trial*) OR (TI group OR AB group)) AND (LA English OR LA Japanese) +絞り込み 出版日付「1966年1月～2019年9月」 | 87 |

CQ1



CQ2



◎二次スクリーニング後の一覧表

| 文献 | 研究デザイン | P | I | C | O | 除外 | コメント |
|---|--------|-----------------------------------|-------------------------------------|-------------------|--------------------------|----|-------------|
| Ghavami H et al., 2017 | RCT | breast cancer survivors | lifestyle intervention | usual care | QOL | 除外 | 群間比較結果の記載なし |
| Kampshoff C S et al., 2015 | RCT | cancer survivors | exercise (high or low-moderate) | wait list control | 有害事象 | | |
| Kenfield S A et al., 2019 | RCT | prostate cancer survivors | lifestyle intervention using Fitbit | usual care | 有害事象 | | |
| Arroyo-Morales M et al., 2012 | RCT | breast cancer survivors | exercise | usual care | fatigue (POMS), 有害事象 | | |
| Kalter J et al., 2015 | RCT | cancer survivors | group-based physical therapy | wait list control | QOL | 除外 | 群間比較結果の記載なし |
| Myers J S et al., 2018 | RCT | breast cancer survivors | Qigong intervention | usual care | cognitive function | 除外 | 群間比較結果の記載なし |
| Saxton J M et al., 2014 | RCT | breast cancer survivors | exercise and nutrition | usual care | depression | | |
| Strunk M A et al., 2017 | RCT | breast cancer survivors | exercise | usual care | QOL, 有害事象 | | |
| Sweeney F C et al., 2018 | RCT | breast cancer survivors | exercise | wait list control | VO2max, strength, 有害事象 | | |
| Galvao D A et al., 2014 | RCT | prostate cancer survivors | exercise (resistance or aerobic) | usual care | fatigue, 有害事象 | | |
| Kinney A et al., 2011 | RCT | senior cancer survivors | exercise (Tai Chi Chih) | control | feasibility有害事象 QOL | | |
| O'Neill R F et al., 2015 | RCT | prostate cancer receiving | dietry and exercise intervention | control | 体組成・ fatigue・ QOL・ | | |
| Burnham T R et al., 2002 | RCT | breast and colon cancer survivors | exercise | usual care | aerobic capacity, 有害事象 | | |
| Cantarero-Villanueva Irene et al., 2016 | RCT | colon cancer survivors | exercise | usual care | 筋力, 有害事象 | | |
| A M Gómez et al., 2011 | RCT | breast cancer survivors | exercise | usual care | 有害事象なし | 除外 | 群間比較結果の記載なし |

| | | | | | | | |
|---|-------------------------|---------------------------------|---------------------------------|----------------------|-----------------------------|----|-------------|
| Harris Melissa et al., 2013 | RCT | breast cancer survivors | lifestyle intervention | usual care | 有害事象なし | 除外 | 群間比較結果の記載なし |
| Santa Mina Daniel et al., 2013 | RCT | prostate cancer survivors | aerobic exercise | resistance exercise | 倦怠感・QOL・peakVO ₂ | 除外 | 群間比較結果の記載なし |
| Seung Ah Lee et al., 2010 | RCT +historical control | breast cancer survivors | | | | 除外 | 群間比較結果の記載なし |
| van Weert Ellen et al., 2010 | RCT | cancer survivors | PT+CBT vs PT only vs usual care | | 倦怠感 | 除外 | 群間比較結果の記載なし |
| Cantarero-Villanueva Irene et al., 2013 | RCT | breast cancer survivors | aquatic exercise | usual care | 倦怠感・筋力 | | |
| Kaltsatou Antonia et al., 2011 | RCT | breast cancer survivors | dance exercise | usual care | 6分間歩行距離・握力・抑うつ | 除外 | 群間比較結果の記載なし |
| Rabin Carolyn et al., 2006 | RCT | breast cancer survivors | exercise | usual care | QOL・倦怠感・歩行テスト・身体活動量 | 除外 | 群間比較結果の記載なし |
| Winters-Stone et al., 2014 | RCT | prostate cancer survivors | exercise | control (stretching) | 有害事象なし | | |
| Daniela L Stan et al., 2016 | RCT | breast cancer survivors | yoga | control (stretching) | 倦怠感・QOL | 除外 | 群間比較結果の記載なし |
| Campbell K L et al., 2018 | RCT | breast cancer survivors | exercise | wait list control | 持久性体力, 有害事象 | | |
| Cantarero-Villanueva I et al., 2011 | RCT | breast cancer survivors | multimodal physical therapy | usual care | 倦怠感, 有害事象 | | |
| Casla S et al., 2015 | RCT | breast cancer survivors | exercise | usual care | 運動耐容能・筋力・QOL, 有害事象 | | |
| Fagevik Olsen M et al., 2017 | RCT | postoperative esophageal cancer | exercise | usual care | 筋力・身体活動量・QOL | 除外 | 群間比較結果の記載なし |
| Ghavami H et al., 2017 | RCT | breast cancer survivors | lifestyle intervention | usual care | 倦怠感・QOL | 除外 | 群間比較結果の記載なし |
| Portela A L et al., 2008 | RCT | breast cancer survivors | gym-based program vs home-based | | 身体機能・QOL | | |
| Peppone L J et al., 2018 | RCT | breast cancer survivors | 薬剤 vs exercise vs both vs | | 骨代謝・運動耐容能・筋力 | 除外 | 群間比較結果の記載なし |

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| Pinto B et al., 2015 | RCT | breast cancer survivors | physical activity telephone | contact control condition | physical health, physical | 除外 | 群間比較結果の記載なし |
| Pope Z C et al., 2018 | RCT | breast cancer survivors | smartwatch- and social media-based | separate but content-identical | physical activity, physiological, | 除外 | 群間比較結果の記載なし |
| Rabin C et al., 2011 | RCT | cancer survivors | access to PA website | information about other cancer- | physical activity and psychosocial | | |
| Rock C L et al., 2015 | RCT | overweight/ obese breast cancer | group-based behavioral intervention | less intensive control | weight and blood pressure | 除外 | 群間比較結果の記載なし |
| Toohey K et al., 2016 | RCT | cancer survivors within 24 | low-volume high-intensity | continuous low-to-moderate | QOL, functional capacity, | 除外 | 群間比較結果の記載なし |
| Yatli V N et al., 2015 | RCT | breast cancer survivors | yoga added to aerobic exercise | aerobic exercise | functional capacity, fatigue, | 除外 | 群間比較結果の記載なし |
| Arinaga Yoko et al., 2019 | RCT | patients with breast cancer- | 10-min holistic self-care | usual care | lymphedema index, health- | 除外 | 群間比較結果の記載なし |
| Dieli-Conwright C M et al., 2018 | RCT | overweight/ obese breast cancer | moderate-vigorous aerobic and | usual care | 有害事象 | | |
| Kim J Y et al., 2019 | RCT | colorectal cancer survivors | home-based exercise program | usual activities | QOL, psychological health, | | |
| Zhou Y et al., 2017 | RCT | women with ovarian cancer | exercise | attention control | health-related QOL, cancer- | | |
| Adams S C et al., 2018 | RCT | testicular cancer survivors | high-intensity interval training | usual care | fatigue, QOL, 有害事象 | | |
| Adams S C et al., 2017 | RCT | testicular cancer survivors | high-intensity interval | usual care | aerobic fitness, CVD risk | 除外 | 群間比較結果の記載なし |
| Arem H et al., 2016 | RCT | breast cancer survivors | exercise | usual care | physical activity, cardiorespira | 除外 | 群間比較結果の記載なし |
| Brown J C et al., 2018 | RCT | cancer survivors | weight loss intervention included | wait-list control | body mass, body composition, | | |
| Buchan J et al., 2016 | RCT | women with a clinical diagnosis of | resistance exercise | aerobic exercise | lymphedema status, lower-body | 除外 | 群間比較結果の記載なし |
| Chapman J et al., 2018 | RCT | breast cancer survivors | online volitional help sheet | implementation intention intervention | leisure-time physical activity, | 除外 | 群間比較結果の記載なし |

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| De Luca V et al., 2016 | RCT | breast cancer survivors | combined aerobic and strength | control | VO2max, BI, strength, fatigue | | |
| Desbiens C et al., 2017 | RCT | breast cancer survivors | group physical activity | individual physical activity | fatigue, aerobic capacity, | 除外 | 群間比較結果の記載なし |
| Galiano-Castillo N et al., 2016 | RCT | breast cancer survivors | internet-based exercise | control | QOL, pain, muscle strength, | | |
| Hagstrom A D et al., 2016 | RCT | breast cancer survivors | resistance training | control | natural killer cell, inflammation, | 除外 | 群間比較結果の記載なし |
| Kampshoff C S et al., 2018 | RCT | cancer survivors | high-intensity exercise | low-to-moderate intensity | cardiorespiratory fitness, muscle | 除外 | 群間比較結果の記載なし |
| Kim T H et al., 2017 | RCT | breast cancer survivors | exercise | control | DKK1, SFRP1, body composition, | 除外 | 群間比較結果の記載なし |
| Nyrop K A et al., 2017 | RCT | breast cancer survivors | walking intervention | wait list control | walking, joint symptoms (pain, | | |
| Rabin C et al., 2016 | RCT | young adult cancer survivors | relaxation and exercise for wellness | wait list control | physical activity, aerobic | 除外 | 群間比較結果の記載なし |
| Rogers L Q et al., 2017 | RCT | breast cancer survivors | multicomponent physical activity | usual care | fatigue, anxiety, depressive | 除外 | 群間比較結果の記載なし |
| Schmitt J et al., 2016 | RCT | breast cancer survivors | multimodal rehabilitation involving | multimodal rehabilitation involving | aerobic fitness, body composition, | 除外 | 群間比較結果の記載なし |
| Sheppard V B et al., 2016 | RCT | breast cancer survivors | diet and exercise | control | anthropometric, physical activity, | 除外 | 群間比較結果の記載なし |
| Shobeiri F et al., 2016 | RCT | breast cancer survivors | aerobic exercise | control | QOL | 除外 | 群間比較結果の記載なし |
| Alibhai S M et al., 2014 | RCT | survivors of acute myeloid | home-based exercise intervention | wait list control | exercise feasibility and safety, | | |
| Baruth M et al., 2015 | RCT | breast cancer survivors | home-based walking intervention | wait list control | 有害事象 | | |
| Brdareski Z et al., 2012 | RCT | breast cancer survivors | aerobic exercise (45%-65% of | aerobic exercise (RPE 4-6, | Body weight, VO2max | 除外 | 群間比較結果の記載なし |
| Brown J C et al., 2012 | RCT | breast cancer survivors | weightlifting | standard care | 有害事象 | | |

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| Christy S M et al., 2011 | RCT | breast and prostate cancer | tailored mailed print intervention | standardized mailed print intervention | 有害事象 dietary habit | 除外 | 結果の記載なし |
| Cuesta-Vargas A I et al., 2014 | RCT | breast cancer survivors | multimodal physiotherapy programme | normal activities | cancer-related fatigue and | 除外 | 結果の記載なし |
| Dolan L B et al., 2016 | RCT | breast cancer survivors | supervised aerobic interval | unsupervised control | VO2peak | | |
| Giallauria F et al., 2014 | RCT | patients with early stage of breast | structured exercise training | general indications to adhere to | 有害事象 (AEなし) anthropomet | | |
| Goodwin P J et al., 2014 | RCT | breast cancer patients | mail-based intervention | individualized lifestyle intervention | disease-free survival, overall | 除外 | 結果の記載なし |
| Johnston M F et al., 2011 | RCT | breast cancer survivors | patient education integrated | usual care | cancer-related fatigue, | | |
| Lee M K et al., 2014 | RCT | breast cancer survivors | web-based self-management | educational booklet on exercise and | exercise and diet, HRQOL, | 除外 | 結果の記載なし |
| Murtezani A et al., 2014 | RCT | breast cancer survivors | moderate-intensity aerobic | control | QOL, physical functioning | | |
| Peppone L J et al., 2010 | RCT | breast cancer survivors | structured weight-bearing | standard support therapy | bone metabolism, fitness | 除外 | 結果の記載なし |
| Rogers L Q et al., 2015 | RCT | breast cancer survivors | exercise intervention (aerobic and | control | diet, sleep, inflammatory mediators, | | |
| Sprod L K et al., 2012 | RCT | Breast cancer survivors | Sessions consisted of a 10-min | The psychosocial therapy | HRQOL (MS SF-36) IL-6, IL-8, | 除外 | 結果の記載なし |
| Winters-Stone K M et al., 2013 | RCT | BCS recently menopausal | Impact + resistance intervention | Participants in the placebo | 筋力 (a one-repetition maximum leg | 除外 | 結果の記載なし |
| Yun Y H et al., 2013 | RCT | Candidates were cancer | The training workshop consisted of | the waiting list | Leadership competency: Satisfaction | 除外 | 結果の記載なし |
| Ahmed R L et al., 2006 | RCT | Eligibility requirements included | Nine common exercises | waiting list | 筋力 (Upper and lower body | | |
| Courneya K S et al., 2003 | RCT | Eligibility criteria included | Participants trained three times per | The control group did not train. To | peak oxygen consumption QOL (FACT- | | |
| Fairey A S et al., 2005 | RCT | Eligibility criteria included 1) | The exercise group | The control group did not train and | Adverse events. Adverse | | |

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| Sprod L K et al., 2005 | RCT | Participants were breast cancer | Exercise Intervention | The control group exercise | ROM and muscular endurance | 除外 | 結果の記載なし |
| Twiss J J et al., 2009 | RCT | Women were included if they were | ST exercises for hip, spine, | comparison (非運動) | 筋力 (Muscle Strength) | 除外 | 結果の記載なし |
| Brown J C et al., 2018 | RCT | 1. Histologically-proven | ARM1: low-dose aerobic exercise | ARM3: usual-care control, | HRQoL (SF-36, Functional | | |
| Gaskin C J et al., 2017 | RCT | Clinicians were eligible for inclusion | Using a standardized process, | Clinicians in the control condition | QOL (EORTC QLQ-C30), うつ (CES-D) | | |
| Hagstrom A D et al., 2019 | RCT | Inclusion criteria have been | a 16 week resistance training | the control group | Upper body strength isometric | 除外 | 結果の記載なし |
| Lahart I M et al., 2016 | RCT | Participants were eligible to | Home-based PA intervention | Usual care group Participants | QOL (FACT-B) PA (IPAQ) | 除外 | 結果の記載なし |
| Musanti R et al., 2012 | RCT | Eligible survivors were | ARM1: aerobic ARM2: resist | ARM4: Flexibility as warm up | Aerobic fitness PSE (physical | | |
| Pisu M et al., 2017 | RCT | eligibility, i.e., at least 19 years old, | The intervention consisted of | wait-list control in which | Functional capacity (6分間歩行), | | |
| Buffart L M et al., 2015 | RCT | cohort of prostate cancer | supervised aerobic and resistance | printed education material | Cancer-specific HRQoL (EOR | 除外 | 結果の記載なし |
| O'Neill L M et al., 2018 | RCT | individuals with breast, prostate, | 12-month, home-based tailored | wait-listed for 12 months. | QOL (SF-36) 下肢機能, 有害事象 | | |
| LaStayo P C et al., 2011 | RCT | All community ambulating | The lower extremity RENEW | usual-care control group | 有害事象 Muscle Strength: | | |
| Morey M C et al., 2009 | RCT | individuals with breast, | 12-month, home-based tailored | wait-listed for 12 months. | PA SF-36 下肢機能 | 除外 | 結果の記載なし |
| Bail J R et al., 2018 | RCT | Inclusion criteria were: 1) | year-long vegetable gardening | a wait-list control | Feasibility HRQOL Vegetable | 除外 | 結果の記載なし |
| Bourke L et al., 2011 | RCT | Study inclusion criteria were | a 12-week program of combined | standard treatment | Fatigue (FACT-F, A 150-second | | |
| Brocki B C et al., 2014 | RCT | Eligible for inclusion were | The treatment group | control For the control | QoL (SF-36) 持久性体力 (6MWT) | | |
| Broderick J M et al., 2013 | RCT | The eligibility criteria were | The exercise intervention | The usual care group | Fitness (The Modified Bruce | | |

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|-----------------------------|--|---|------------------------------------|--|------------------------------------|----|-----------|
| Brown J C et al., 2018 | RCT | Participants were 91 eligible if | ARM1: high-dose aerobics | ARM3: usual-care | PA sICAM-1 and | 除外 | 結果の記載なし |
| Carson J W et al., 2009 | RCT | To be eligible, patients had | yoga The intervention | wait-list control group | 倦怠感 (Daily menopausal symptomsの | 除外 | 結果の記載なし |
| Carter S J et al., 2018 | RCT | All participants were | INT included counseling/ group | Individuals randomized to the | Self-reported depression (HADS) PA | | |
| Crawford J J et al., 2017 | RCT | Inclusion criteria included (a) | Wall Climbing Intervention | usual care (UC) Participants | 持久性体力, 筋力 (The 30- | | |
| Culos-Reed S N et al., 2010 | RCT | n=100, men receiving androgen | 1. We hypothesized that a | Allocated to wait-list control | 1. PA behavior The | | |
| DeMello M M et al., 2018 | RCT In this randomised controlled trial, our | 1. Eligibility criteria for participant | 2. The overall goal was to | RTR Controls were asked | QOL (SF-36) (FACT-B), 倦怠感 | 除外 | 結果の記載なし |
| Derry H M et al., 2015 | RCT | Female stage 0-IIIa breast | Women in the yoga condition | a wait list control condition | physical activity, fatigue and | 除外 | 結果の記載なし |
| Devin J L et al., 2018 | RCT 3 arm | Men and women previously | intensity interval exercise | (1) MICE, (2) HIIE or (3) HIIE-tapered | cardiorespiratory fitness and body | 除外 | 結果の記載なし |
| Devin J L et al., 2016 | RCT | colorectal cancer survivors | MIE (70 % HR peak) in equivalence | HIE [85-95 % peak heart rate | cardiorespiratory fitness and body | 除外 | 結果の記載なし |
| Frensham L J et al., 2018 | RCT | Participants were recruited via | Steps Toward Improving | Allocated to wait-list control | 2.Functional Status and Quality of | 除外 | 結果の記載なし |
| Galvao D A et al., 2018 | RCT | men with localized prostate | a monthly telephone-based group | usual care | QOL, うつ | 除外 | 結果の記載なし |
| Galvao D A et al., 2014 | RCT | Inclusion criteria consisted of | 1. During months 7-12, the EX | physical activity with printed | 1. Self-reported physical | 除外 | 結果の記載なし |
| Gaskin C J et al., 2016 | cluster RCT | Eligible patients will be adult | 1. Exercise training intervention | Clinicians in the control condition (n | 1. Outcome measures included | | |
| Giallauria F et al., 2016 | RCT | 2. Fifty-one female patients | | 2. Control group (26 patients) | baseline anthropometrical, BC | 除外 | 評価時期が合わない |
| Golsteijn R H et al., 2018 | RCT | Prostate and colorectal cancer | OncoActive participants received a | usual-care waiting-list control | QOL, うつ | 除外 | 結果の記載なし |
| Greenlee H A et al., 2013 | RCT | 1. Potentially eligible women were | 30-min exercise circuit and a | the waitlist control arm, par- | 持久性体力 body weight, weight lost, | | |

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| Hagstrom A D et al., 2016 | RCT | breast cancer survivors, 39 | Participants randomised to the | Allocated to wait-list control | fatigue and QOL, fatigue and quality | 除外 | 結果の記載なし |
| McNeely M L et al., 2008 | RCT | 1. Eligibility criteria also | All participants were asked | PRET (n 5 27) or a standardized | Shoulder Pain and Disability I | 除外 | アウトカムが合わない |
| McNeil J et al., 2019 | RCT | 1. Eligibility criteria included: | 1. Participants randomized | Participants randomized to the | PA and sedentary time | | |
| Midtgaard J et al., 2013 | RCT | Inclusion eligibility were (i) | exercise-based rehabilitation | The HE group received | percentage of patients reporting | 除外 | 結果の記載なし |
| Milne H M et al., 2008 | RCT | Breast cancer survivors | combined aerobic and resistance | | QOL, 倦怠感, 体力 | | |
| Ohira T et al., 2006 | RCT | 86 survivors (4-36 months) | 1. There was a partial cross-over | TAU | quality of life (QOL, QOL and | 除外 | 結果の記載なし |
| Pinto B et al., 2017 | RCT | 1. Participants Women aged >21 | 1.A randomized controlled | Contact control group | QoL 倦怠感 sitting time (self-report | 除外 | 群間比較結果の記載なし |
| Pinto B M et al., 2013 | RCT | colorectal cancer survivors, | telephone counseling to support | Contact control group | submaximal aerobic fitness, | | |
| Porter L S et al., 2018 | RCT | Twenty cancer survivors | couple-based PA intervention, | intervention or waitlist control. | FACT-G, PA, partner support, and | 除外 | 結果の記載なし |
| Rogers L Q et al., 2015 | RCT | 1. Inclusion criteria included: (1) | 1. In brief, the 3-month BEAT | usual care | 有害事象 | | |
| Rogers L Q et al., 2016 | RCT | breast cancer survivors, | 1. In brief, the 3-month BEAT | usual care | SF-36 physical health, SF- | 除外 | 結果の記載なし |
| Rogers L Q et al., 2013 | RCT | BCSs, breast cancer | physical activity behavior | | 有害事象 | | |
| Rogers L Q et al., 2009 | RCT | Forty-one sedentary women on | 12-wk multidisciplinary physical | usual care | 有害事象 | | |
| Rogers L Q et al., 2014 | RCT | Postmenopausal breast cancer | exercise intervention, exercise | The control group was instructed | 有害事象 | | |
| Saarto T et al., 2012 | RCT | n=573, Inclusion criteria | The duration of the exercise | The control group was encouraged | QOL (EORTC QLQ-C30), | 除外 | 結果の記載なし |
| Saarto T et al., 2012 | RCT | n=573, Inclusion criteria | The duration of the exercise | The control group was encouraged | 持久性体力 (figure-8 running test) | 除外 | 結果の記載なし |

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| Sandel S L et al., 2005 | RCT | n=35, inclusion criteria were | dance and movement program | Allocated to wait-list control | 有害事象 | | |
| Scott E et al., 2013 | RCT | A total of 90 overweight women with | The 24-week lifestyle | The control group received a | 持久性体力 (submaximal, 8-min, | | |
| Segar M L et al., 1998 | crossover, 3群 | n=24, 手術を完了した乳がんサバイバー | ①旧ACSMガイドラインに準拠した運動 | Woman in the control group were | 不安 (STAI), うつ (Beck) | 除外 | 結果の記載なし |
| Short C E et al., 2015 | RCT, 3arm nationally based randomised, three- | n=330, English proficient | All intervention materials | Participants assigned to the | QOL (FACT-B), Fatigue (FAC | 除外 | 結果の記載なし |
| Speck R M et al., 2010 | RCT, 4arm with or without lymphedema, | N=295, female gender, | For the first 13 weeks, treatment | wait-list control group | QOL (SF-36), 筋力 (1-RM bench | 除外 | 結果の記載なし |
| Sprod L K et al., 2015 | RCT | n=97, following criteria: a) | Participants assigned to the standard | Participants in the standard | 倦怠感 (MFSI-SF), 有害事象, | 除外 | 結果の記載なし |
| Swisher A K et al., 2015 | RCT | n=28, Inclusion criteria | Participants randomized to the | Participants randomized to the | 持久性体力 (VO2peak), QOL (FACT- | 除外 | 結果の記載なし |
| Vallance J K et al., 2007 | RCT, 4 arm | n=377, Eligibility criteria | All groups received a standard | receiving a standard PA recommenda | QOL (FACT-B), Fatigue (Fati | | |
| Van Blarigan E L et al., 2019 | RCT | 42 individuals who had | 12-week (84 days) physical | print educational materials | physical activity, adverse | 除外 | 結果の記載なし |
| Waltman N L et al., 2010 | RCT | 223 postmenopausal breast | exercise plus medication | medication only | 有害事象 | | |
| Webb J et al., 2019 | RCT | 207 adult cancer survivors | a print-based intervention | a standard letter recommenda | physical activity, self- | 除外 | 結果の記載なし |
| Winters-Stone K M et al., 2012 | RCT | 106 older, postmenopausal breast | 1-year resistance + impact | a stretching placebo program | one repetition maximum | 除外 | 結果の記載なし |
| Winters-Stone K M et al., 2011 | RCT | 106 women with early stage breast | 1 year of thrice-weekly | a similar frequency and length | 有害事象 | | |
| Winters-Stone K M et al., 2016 | RCT | 64 couples of prostate cancer | 6 months of partnered strength | usual care | body composition (lean, fat | 除外 | 結果の記載なし |
| Yang E J et al., 2012 | RCT | 34 patients with gynecologica | a 4-week PFRP exercise | the usual health care | The pelvic floor strength, the | 除外 | 結果の記載なし |
| Yeo T P et al., 2012 | RCT | 102 patients with resected | walking intervention | usual care | visual analog scales, the FACIT- | 除外 | 結果の記載なし |

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| Yuen H K et al., 2007 | RCT | 29 breast cancer survivors | aerobic exercise (AE), | usual care control (CON) | the revised Piper Fatigue | 除外 | 結果の記載なし |
| Yun Y H et al., 2017 | RCT | 248 cancer survivors | Leadership and Coaching for | a health education booklet on | PA scores, the intake of vegetables | 除外 | 結果の記載なし |
| Hartman S J et al., 2018 | RCT | 87 female breast cancer | Physical activity intervention | Waitlist wellness-contact | objective cognition was | 除外 | 結果の記載なし |
| Hawkes A L et al., 2013 | RCT | 410 colorectal cancer | 6-month telephonedelivered health | four freely available educational | PA, HRQoL, and cancer-related | 除外 | 結果の記載なし |
| Herrero F et al., 2006 | RCT | 16 women breast cancer | 8-week exercise program | control non-exercising group | the cardiorespiratory fitness, | 除外 | 結果の記載なし |
| Irwin M L et al., 2008 | RCT | 75 postmenopausal breast | 150 min/wk of supervised | instructed to maintain current | 有害事象 | | |
| Irwin M L et al., 2017 | RCT | 186 cancer survivors | a 12-week, twice-weekly | exercise program after their | 有害事象 | | |
| Johansson K et al., 2013 | RCT | 29 breast cancer survivors | at least twice-weekly | instructed to continue exercises, if | 有害事象 | | |
| Kim S H et al., 2016 | RCT | 43 women with breast cancer who | a 6-month combined home-based | calcium and vitamin D supplements | 有害事象 | | |
| Kim S H et al., 2018 | RCT | 51 prostate cancer survivors | a 6-month home-based exercise | an exercise placebo intervention | 筋力, 有害事象 | | |
| Kim S H et al., 2011 | RCT | 45 women with breast cancer who | a 12-week individualized | control | Program feasibility, behavioral | 除外 | 結果の記載なし |
| Kneis S et al., 2019 | RCT | 50 cancer survivors with | endurance plus balance training, | only endurance training | functional performance , | 除外 | 結果の記載なし |
| Lahart I M et al., 2018 | RCT | 32 post-adjuvant therapy | a six-month home-based PA | usual care | Cardiorespiratory fitness and self- | 除外 | 結果の記載なし |
| Leach H J et al., 2019 | RCT | 26 women with stage I or II breast | a group dynamics-based | a personal training | QOL, physical fitness, PA | 除外 | 結果の記載なし |
| Lee M K et al., 2017 | RCT | 123 stage II-III CRC patients | aerobic and resistance training, with | standard care control | The primary outcome was fasting | 除外 | 結果の記載なし |
| Lee M K et al., 2018 | RCT | 72 stage II to III colorectal | the 6-week home-based exercise | usual care | physical activity level and physical | | |

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|---------------------------------|---------|--------------------------------|------------------------------------|-------------------------------------|------------------------------|----|---------------------|
| Lee Y H et al., 2018 | RCT | 80 cancer survivors | E1 (Qigong exercise [QE]) or E2 | the control group | Cancer-related fatigue, FOR, | 除外 | 結果の記載なし |
| Ligibel J A et al., 2012 | RCT | 121 sedentary (engaging in | ten phone calls over the course | routine care for 16 weeks and was | physical activity, fitness, | 除外 | 結果の記載なし |
| Loh S Y et al., 2014 | RCT | 197 breast cancer survivors | 8-week Kuala Lumpur | aerobic, a group line-dancing | quality of life (QoL) | 除外 | 結果の記載なし |
| Martin E A et al., 2015 | RCT | 87 prostate cancer survivors | low-intensity (n = 44, 60%- | continued usual routines | VO2peak and self-reported | 除外 | 結果の記載なし |
| Brown JC et al., 2015 | RCT | 295 survivors of nonmetastat | twice-per-week slowly progressive | standard care | 有害事象 | | |
| Yang Zhou et al., 2017 | RCT | 74 ovarian cancer survivors | a six-month home-based, telephone- | attention control | QOL, 倦怠感, 有害事象 | | |
| Scott C Adams et al., 2018 | RCT | 63 Testicular cancer survivors | 12 weeks of supervised high- | usual care | 有害事象 | | |
| Dieli-Conwright CM et al., 2018 | RCT | 20 obese postmenopausal breast | 16-week aerobic and resistance | delayed intervention control | 有害事象 | | |
| Dieli-Conwright CM et al., 2018 | RCT | 100 ethnically diverse, | supervised moderate-to-vigorous | usual care | 有害事象 | | |
| Milne Helen M et al., 2008 | RCT | 80 women that were operated on | instructed to practice supervised | instructed to continue their normal | quality of life (QOL) | 除外 | 結果の記載なし |
| Goodwin PJ et al., 2020 | RCT | 338 T1-3, NO-3, M0 hormone | combined with a standardized | mail-based educational material | The primary outcome was | | |
| Hayes SC et al., 2017 | RCT | postsurgical breast cancer | exercise | usual care | survival | 除外 | 対象者に化学療法中の患者が含まれるため |
| Ibrahim M et al., 2018 | RCT | young breast cancer patients | exercise | usual care | upper limbs pain | 除外 | アウトカムが痛みであるため |
| James EL et al., 2015 | RCT | cancer survivors and carer | exercis | wait list control | physical activity | 除外 | アウトカムがCQを満たさない |
| Sherman KA et al., 2018 | RCT | cbreast cancer survivors | Web-based psychological | usual care | distress/ anxiety | 除外 | 介入に運動含まない |
| Gill E et al., 2016 | not RCT | young cancer survivors | outdoor | wlc | activity | 除外 | not RCT |

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|-------------------------------|---------|--------------------------------|-------------------------------------|------------|---------------------------|--|----|---------------------------|
| Hayes SC et al.,2018 | RCT | | | | | | 除外 | |
| Hubbard G et al.,2016 | RCT | coorectal cancer survivors | cardiac rehabilitation | usual care | qualitative data | | 除外 | 対象者の中に術後補助療法中の患者も含まれているため |
| Janni W et al.,2019 | RCT | breast cancer after chemothera | lifestyle intervention | usual care | disease-free survival | | 除外 | 総説 |
| Kavanagh MB et al.,2009 | RCT | cancer survivors | lifestyle intervention | usual care | 栄養指標 | | 除外 | アウトカムがCQを満たさない |
| Koonj BB et al.,2019 | RCT | prostate cancer survivors | exercise | usual care | QOL, anxiety, distress | | 除外 | 副論文 |
| Maxwell-Smith CM et al.,2018 | RCT | colorectal and endometrial | lifestyle intervention using Fitbit | usual care | physical activity | | 除外 | アウトカムがCQを満たさない |
| Newton RU et al.,2017 | RCT | | | | | | 除外 | 総説 |
| Pinto BM et al.,2004 | RCT | breast cancer survivors | home-based program | usual care | recruitment methods | | 除外 | アウトカムがCQを満たさない |
| Senn-Malashonak A et al.,2014 | RCT | | | | | | 除外 | 対象が18歳未満 |
| Stern M et al.,2018 | RCT | | | | | | 除外 | 対象がcaregiver |
| Thomas GA et al.,2013 | RCT | breast cancer survivors | exercise | usual care | metabolic outcomes | | 除外 | アウトカムがCQを満たさない |
| Tina LS et al.,2016 | not RCT | prostate cancer survivors | | | physical function (muscle | | 除外 | not RCT |
| Wang Y et al.,2018 | RCT | | | | | | 除外 | 論文が異なる |
| Dittus KL et al.,2018 | RCT | | Internet-based behavioral | | | | 除外 | 対象者に術後chemo症例が含まれている |
| Greenlee H et al.,2016 | RCT | breast cancer survivors | lifestyle intervention | usual care | | | 除外 | アウトカムがCQを満たさない |
| Howell CR et al.,2018 | RCT | | | | | | 除外 | 対象者が18歳未満 |

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|------------------------------------|---------|------------------------------|--------------------------|-------------------|------------------------|--|----|--------------------------------------|
| Isrctn et al.,2012 | RCT | | | | | | 除外 | 対象者が補助化学療法中 |
| Mina DS et al.,2014 | RCT | prostate cancer survivors | exercise | control | 〈secondary〉 抑うつ・不安 | | 除外 | single boutだが？ 介入期間について取り決めていなかった |
| Thomas GA et al.,2017 | RCT | breast cancer survivors | exercise | usual care | 体組成 骨密度 | | 除外 | アウトカムがCQを満たさない |
| Bertram LA et al.,2011 | Non-RCT | | | | | | 除外 | Non-RCT |
| Cantarero-Villanueva I et al.,2013 | Non-RCT | breast cancer survivors | aquatic exercise | wait list control | 〈secondary〉 fatigue | | 除外 | Non-RCT |
| Clément-Guillotin C et al.,2015 | RCT | | | | | | 除外 | 対象が合わない |
| Gehring K et al.,2018 | RCT | stable glioma | exercise | wait list control | Vo2 peak | | 除外 | 6か月以上状態安定の glioma これはがんサバの定義に合致するのか？ |
| Irwin ML et al.,2009 | RCT | breast cancer survivors | exercise | usual care | 身体活動量 体組成 | | 除外 | アウトカムが合わない |
| Leach HJ et al.,2019 | RCT | breast cancer survivors | group-exercise | personal-exercise | | | 除外 | 集団介入と個別介入の RCT |
| Pakiz B et al.,2011 | RCT | breast cancer survivors | weight loss intervention | usual care | 体組成・身体活動量・心拍数(ステップ) | | 除外 | アウトカムが合わない |
| Pinto B et al.,2015 | Non-RCT | | | | | | 除外 | Non-RCT |
| Rogers LQ et al.,2011 | RCT | breast cancer survivors | exercise | usual care | 身体活動量・運動の制限因子 | | 除外 | アウトカムがCQを満たさない |
| Michelle CJ et al.,2016 | RCT | cancer survivors | yoga | usual care | 記憶障害・睡眠障害 | | 除外 | アウトカムがCQを満たさない |
| Axley PD et al.,2017 | RCT | | | | | | 除外 | 学会抄録のみ |
| Belanger LJ et al.,2014 | RCT | young adult cancer survivors | | | | | 除外 | 介入に用いるガイドラインの違いによるRCT |
| Bucciarelli V et al.,2017 | RCT | | | | | | 除外 | 学会抄録のみ |

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|---------------------------------|-----------|---------------------------------|----------------------------------|-----------------------------------|----------------------------------|----|------------------------------|
| Charalambous A et al.,2017 | RCT | | | | | 除外 | 学会抄録のみ |
| Demark-Wahnefried W et al.,2006 | RCT | elderly cancer patients | | | | 除外 | 対象ががん患者 |
| Dincer U et al.,2007 | RCT | breast cancer survivors | | | | 除外 | RCTは介入方法の違いに関するもの。かつ、本文が非英語。 |
| Hartman SJ et al.,2015 | RCT | | | | | 除外 | 対象者はがんサバイバーでない |
| Kanera IM et al.,2017 | RCT | cancer survivors | web-based intervention | wait list control | 身体活動量 | 除外 | アウトカムが合わない |
| McGinnis GJ et al.,2017 | RCT | | | | | 除外 | 学会抄録のみ |
| Siedentopf F et al.,2013 | RCT | newly diagnosed with early | yoga | waiting control | QOL | 除外 | 対象が合わない |
| Andrea DB et al.,2016 | RCT | breast cancer survivors | Nordic walking and ISA method | four intervention arms | upper limb circumferences, total | 除外 | アウトカムが合わない |
| Jeong JH et al.,2015 | RCT | patients scheduled for lung | caregiver education on pulmonary | general management | pulmonary muscle strength | 除外 | 対象が合わない |
| Kim DJ et al.,2009 | RCT | patients undergoing bowel | pre-surgical aerobic exercise | attention-matched control | aerobic fitness | 除外 | 対象が合わない |
| Laurienzo CE et al.,2018 | RCT | men with prostate cancer | pelvic floor muscle training and | control | pelvic floor muscle strength | 除外 | 対象が合わない |
| Park JH et al.,2017 | RCT | women with breast cancer- | complex exercise | conventional decongestive therapy | shoulder range of motion and | 除外 | アウトカムが合わない |
| Dennett AM et al.,2018 | RCT | cancer survivors | oncology rehabilitation with PT- | oncology rehabilitation | physical activity, physical | 除外 | 介入が合わない |
| Knips L et al.,2019 | Review | adult patients with haematologi | aerobic physical exercise | control | overall survival, QOL, | 除外 | Review |
| Salerno EA et al.,2019 | RCT | breast cancer survivors | acute aerobic exercise | control | cognitive function | 除外 | Randomized crossover trial |
| Baumann FT et al.,2017 | quasi-RCT | breast cancer patients | exercise | rehabilitation | physical activity, fatigue, QOL | 除外 | quasi-RCT |

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|------------------------------------|-------------------------|--------------------------------------|----------------------------------|--------------------------------|---------------------------------|----|-------------------------------------|
| Bloomquist K et al.,2018 | Cross-over trial | breast cancer patients | heavy-load upper-extremity | low-load upper-extremity | arm swelling | 除外 | Cross-over trial |
| Cornie P et al.,2016 | Cross-over trial | women with breast cancer- | high-load resistance exercise | low- and moderate-resistance | lymphedema status | 除外 | Cross-over trial |
| Kanera IM et al.,2016 | RCT | cancer survivors | web-based cancer aftercare | control | physical activity, dietary | 除外 | アウトカムが合わない |
| Karenovics W et al.,2017 | RCT | patients with operable lung cancer | high-intensity interval training | usual care | cardiopulmonary function | 除外 | 対象が合わない |
| Mama SK et al.,2017 | RCT | breast cancer survivors | home-based exercise (culturally) | home-based exercise (standard) | self efficacy, social support, | 除外 | アウトカムが合わない |
| Pinto BM et al.,2017 | RCT | cancer survivors | peer mentors delivering | contact control condition | physical activity, motivational | 除外 | デザインが合わない |
| Rath SR et al.,2018 | One-arm trial | adolescent and young adult | pragmatic exercise intervention | - | auxology, body composition, | 除外 | One-arm trial |
| Rief H et al.,2016 | RCT | patients with spinal bone metastases | resistance training | passive physical therapy | bone survival, overall | 除外 | 対象が合わない |
| Stacey FG et al.,2017 | RCT | cancer survivors | health eating, healthy | wait list control | physical activity, dietary | 除外 | アウトカムが合わない |
| Tabatabai LS et al.,2016 | RCT | breast cancer patients | exercise | - | FSH | 除外 | Secondary analysis of RCT (one arm) |
| Tomietich DB et al.,2017 | RCT | breast cancer survivors | diet and exercise | - | weight-related outcomes | 除外 | Secondary analysis of RCT (one arm) |
| Valle CG et al.,2017 | RCT | young adult cancer survivors | Facebook-based physical | self-help | Facebook engagement | 除外 | アウトカムが合わない |
| Winters-Stone KM et al.,2018 | Pooled analysis of RCTs | breast cancer survivors | resistance exercise | placebo control | biomarkers and body composition | 除外 | Pooled analysis of RCTs |
| Banasik J et al.,2011 | RCT | breast cancer survivors | Yoga practice | wait list control | salivary cortisol, QOL | 除外 | 対象が合わない |
| Cantarero-Villanueva I et al.,2012 | RCT | breast cancer survivors | water physical therapy | | neck and shoulder pain, | 除外 | アウトカムが合わない |
| Courneya KS et al.,2013 | RCT | lymphoma patients | supervised aerobic exercise | usual care | trial satisfaction | 除外 | アウトカムが合わない |

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|---------------------------------|--------------------|-------------------------------------|----------------------------------|-----------------------------------|----------------------------------|----|--|
| DeNysschen C et al.,2015 | Secondary analysis | breast cancer survivors | received intervention over the | standard care | compliance with ACS guidelines, | 除外 | Secondary analysis of RCT (ex post facto design) |
| Dolan LB et al.,2012 | Cross-over trial | breast cancer survivors | - | - | - | 除外 | Cross-over trial |
| Fernandez-Lao C et al.,2013 | 非RCT | breast cancer survivors | land/water exercise | usual care | body composition, upper limb | 除外 | 非RCT |
| Guinan E et al.,2013 | RCT | breast cancer patients | aerobic exercise intervention | control | body composition, blood | 除外 | アウトカムが合わない |
| Lawn S et al.,2015 | One-arm trial | cancer survivors during or | self-management program to | - | self-management capability | 除外 | One-arm trial |
| Schwartz AL et al.,2015 | RCT | cancer survivors | exercise program plus online | exercise only | aerobic capacity, strength | 除外 | 介入が合わない |
| Thijs KM et al.,2012 | RCTではない | | | | | 除外 | RCTではない |
| Trinh L et al.,2014 | RCT | Inclusion criteria were women | | | | 除外 | 治療中のため除外 |
| Gruenigen VV et al.,2012 | RCT | Women with histologically confirmed | Sixteen group sessions | usual care | Weight Physical Activity | 除外 | CQのアウトカム測定無し |
| Courneya KS et al.,2003 | RCT | Eligibility criteria for the study | an exercise group | wait-list control | QOL satisfaction with life, | 除外 | 化学療法中の人が含まれる |
| Courneya KS et al.,2005 | RCT | | | | | 除外 | RCTの介入群に関する報告 |
| Demark-Wahnefried W et al.,2007 | RCT | Early-stage (in situ, localized, or | | | | 除外 | 対象が前立腺がんと乳がんの診断から9か月。デザイン論文を含めて治療との |
| Irwin ML et al.,2009 | RCT | Seventy-five postmenopa | an exercise | usual care | Blood levels of insulin and IGF | 除外 | 学会抄録, CQのアウトカム測定無し |
| Korstjens I et al.,2008 | RCT | Eligible for the study were cancer | PT+CBT | arm2:PT arm3:waiting list(ランダム | HRQOL | 除外 | arm3はランダム割り付けられておらず, arm1vsarm2はCBTの効 |
| Ligibel JA et al.,2009 | RCT | Eligibility criteria included | a 16-week exercise intervention, | The control group received | a fasting blood Body weight | 除外 | CQのアウトカム測定無し |
| Matthews CE et al.,2007 | RCT | Women were eligible if they had | a home-based walking | a wait-list control group | Physical activity Body weight | 除外 | CQのアウトカム測定無し |

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|--------------------------------|----------|-----------------------------------|-----------------------------------|------------------------------------|-------------------------------------|----|-------------------------------------|
| May AM et al.,2009 | RCT | Patient inclusion criteria were | CBT+PT | PT | | 除外 | CBTの効果しか見れていない |
| May AM et al.,2008 | RCT | Inclusion criteria were: last | CBT+PT | PT | | 除外 | CBTの効果しか見れていない |
| McNeely ML et al.,2004 | RCT | All subjects were diagnosed | Exercise group | Control group | recruitment rate, completion | 除外 | 治療中含む |
| Milne HM et al.,2008 | RCT | Eligibility criteria included | immediate exercise group | delayed exercise group | Physical Activity Readiness | 除外 | CQのアウトカム測定無し 質問紙のコンポーネントに該当ある？ |
| Mosher CE et al.,2008 | RCT | total of 306 breast cancer | | | | 除外 | 対象が前立腺がんと乳がんの診断から9か月。デザイン論文を含めて治療との |
| Schmitz KH et al.,2005 | RCT | recent breast cancer | immediate treatment | delayed treatment | waist circumference as well as | 除外 | CQのアウトカム測定無し |
| Sloane R et al.,2009 | RCT | total of 306 breast cancer | | | | 除外 | 対象が前立腺がんと乳がんの診断から9か月。デザイン論文を含めて治療との |
| Dieli-Conwright CM et al.,2018 | RCT | Eligible participants were , 6 | progressive combined— aerobic and | usual care | metabolic syndrome z-score | 除外 | CQのアウトカム測定無し |
| Hirschey R et al.,2018 | RCT | Eligibility criteria included: 1) | The booklet provided a global | The control arm received a | Fidelity. Outcome expectations | 除外 | CQのアウトカム測定無し |
| Ibrahim M et al.,2017 | RCT | Young women were eligible if | | | | 除外 | 化学療法または放射線療法を含む術後治療を予定している患者が対象 |
| Snyder DC et al.,2008 | post hoc | | | | | 除外 | post hoc |
| Golsteijn RH et al.,2017 | post hoc | | | | | 除外 | post hoc |
| Jensen BT et al.,2016 | post hoc | Inclusion criteria were (1) more | 12-week RESTORE program | usual care (standard clinical care | 持久性体力 (CPET, maximal | 除外 | post hoc |
| Maeda K et al.,2016 | RCTでない | All community ambulating | The lower extremity RENEW | usual-care control group | Muscle Size: Quadriceps Lean Tissue | 除外 | RCTでない |
| Snyder DC et al.,2009 | protocol | | | | | 除外 | protocol |
| Adams BD et al.,2018 | 二次解析 | | | | | 除外 | 二次解析 |

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|-------------------------|--------------|------------------------------------|-------------------------------|------------------|-------------------------------------|----|--|
| Anderson RT et al.,2012 | RCT | Eligibility criteria included: (1) | | | | 除外 | 化学療法または放射線療法を受けている患者が含まれている |
| Anulika AH et al.,2015 | RCT | | | | | 除外 | Fifty-eight (58) premenopausal and postmenopausal BC |
| Aycinena AC et al.,2017 | 二次解析 | | | | | 除外 | 二次解析 |
| Beidas RS et al.,2014 | Cohort Study | | | | | 除外 | Cohort Study |
| Brown JC et al.,2014 | 二次解析 | | | | | 除外 | 二次解析 |
| Brown JC et al.,2018 | RCT | Participants were 91 eligible if | ARM1: high-dose aerobics | ARM3: usual-care | Insulin and C-peptide Glucose | 除外 | CQのアウトカム測定無し |
| Brown JC et al.,2017 | RCT | Participants were 91 eligible if | ARM1: high-dose aerobics | ARM3: usual-care | Body composition | 除外 | 既報あり, CQのアウトカム測定無し |
| Bruno E et al.,2018 | RCT | Inclusion criteria were: (1) | a supervised AEI for 3 months | control | anthropometric and body composition | 除外 | CQのアウトカム測定無し |
| Buffart LM et al.,2014 | RCTの二次解析 | | | | | 除外 | RCTの二次解析 |
| Campo RA et al.,2014 | RCT | their eligibility for enrollment. | | | | 除外 | 化学療法・放射線療法を行っている患者を含む |
| Carter SJ et al.,2016 | 二次解析 | | | | | 除外 | 二次解析 |
| Cases MG et al.,2016 | protocol | | | | | 除外 | protocol |
| Chen HM et al.,2015 | RCT | primary lung cancer, were aged X18 | walking exercise group | usual care | | 除外 | 化学療法・放射線療法を行っている患者を含む |
| Cormie P et al.,2013 | RCT | Participants had a histological | | | | 除外 | 化学療法・放射線療法を行っている患者を含む |
| Cormie P et al.,2013 | RCT | established bone metastases | exercise | usual care | | 除外 | 骨転移あり(化療は除外されている) |
| Cormie P et al.,2013 | RCT | Participants had a histological | ARM1: a high-load resistance | ARM3: usual-care | | 除外 | 化学療法・放射線療法を行っている患者を含むが記載がない |

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|---------------------------------|---------|--|------------------------------------|----------------------------------|-----------------------------------|----|------------------------------------|
| Courneya KS et al.,2015 | RCT | eligible for the trial if they | The exercise group | control | Progression-free survival | 除外 | 化学療法中も含む |
| Courneya KS et al.,2002 | RCT | 1. A cancer diagnosis. 2. Voluntary | | | | 除外 | 化学療法・放射線療法を行っている患者を含む |
| Courneya KS et al.,2003 | RCT | | GP plus home-based, moderate- | group psychotherapy | | 除外 | 化学療法・放射線療法を行っている患者を含む |
| Courneya KS et al.,2006 | 二次解析 | | | | | 除外 | 二次解析 |
| Courneya KS et al.,2016 | 二次解析 | | | | | 除外 | 二次解析 |
| Craike MJ et al.,2018 | RCT | completed active treatment | The 12-week exercise | Men in the control condition | PA Outcome expectations | 除外 | CQのアウトカム測定無し |
| Daley AJ et al.,2004 | RCT | women who have had breast | exercise therapy intervention. | body conditioning (placebo | quality of life, physical self- | 除外 | この論文は試験デザインのみ。結果論文があれば採用すべきもの。 |
| Demark-Wahnefried W et al.,2015 | RCT | women (age 21+ years) with a | the intensive intervention (group- | the less intensive intervention | | 除外 | ENERGY試験のメイン論文は採用すべき |
| Dhillon HM et al.,2017 | RCT | Stage III/IVの非小細胞肺癌or小細 | | | | 除外 | 実際、化学療法中の患者が多く、除外 |
| Dieli-Conwright CM et al.,2019 | RCT | | | | | 除外 | 既報あり、Secondary analysis |
| Donnelly CM et al.,2013 | RCT | sedentary gynaecological cancer | a behavioural change, | Contact Control group | fatigue (Multidimensional Fatigue | 除外 | 治療中が含まれている |
| Fairey AS et al.,2003 | RCT | postmenopausal breast cancer | The exercise group trained on | The control group did not train. | changes in fasting insulin, | 除外 | 血糖値やインスリン関連バイオマーカーを評価する研究であり、アウトカム |
| Foley MP et al.,2018 | RCTではない | breast cancer survivors | | | | 除外 | RCTではない |
| Fong SS et al.,2014 | RCTではない | | | | | 除外 | RCTではない |
| Forbes CC et al.,2017 | RCT | Breast, prostate and colorectal | online Theory of Planned | usual care | Motivational variables from the | 除外 | アウトカムが合わない |
| Martin E et al.,2013 | RCT | female breast cancer | ・MVe Fitness ChairTM 8 | ・a control group (no exercise) | Muscular endurance | 除外 | アウトカムが合わない |

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|----------------------------|---------|-----------------------------------|----------------------------------|---------------------------|-------------------------------------|----|--|
| McKenzie DC et al.,2003 | RCT | breast cancer survivors | 8-week upper-body exercise | | arm circumference and | 除外 | リンパ浮腫へのケアの研究。アウトカムにはQOLも含まれている。 |
| Mefferd K et al.,2007 | RCT | overweight or obese breast | a once weekly, 16-week | wait-list control group | Anthropometric measurement | 除外 | CBTが主な介入 |
| Nikander R et al.,2012 | RCT | breast cancer survivors | aerobic impact exercise | control group | Anthropometry and body composition | 除外 | 化学療法中の患者が対象 |
| Norris MK et al.,2015 | RCT | prostate cancer survivors | 12 weeks of supervised RT | 12 weeks of supervised RT | | 除外 | 介入ありなしの比較ではなく、頻度の比較 |
| Northey JM et al.,2019 | RCT | female cancer survivors | high-intensity interval | wait-list control | cognitive function, resting | 除外 | アウトカムが合わない、化学療法が含まれる |
| Ochalek K et al.,2018 | RCT | women after breast cancer | compression group received | no compression group | | 除外 | 上肢圧迫の有無の比較。standardized physical exercise programは両群 |
| Ottenbacher AJ et al.,2012 | RCT | breast and prostate cancer | | | | 除外 | FRESH START試験のランダム化部分ではない部分の比較 |
| Park J et al.,2017 | RCTではない | patients with previous colorectal | | | | 除外 | RCTではない |
| Penttinen H et al.,2009 | RCT | | | | | 除外 | 既報あり, The BREX study |
| Penttinen HM et al.,2011 | RCT | female breast cancer | | | EORTC QLQ-C30, FACIT-F, | 除外 | 既報あり, The BREX study |
| Rief H et al.,2016 | RCT | metastatic bone during radiation | | | | 除外 | 治療中のがん患者 |
| Robertson MC et al.,2019 | RCT | Endometrial cancer survivors | a telephone-based physical | なし | Cardiorespiratory fitness, | 除外 | 既報あり, Basen-Engquist K, Carmack C, Brown J, et |
| Rogers LQ et al.,2017 | RCT | Post-treatment breast | the 3-month Better Exercise | usual care | physical activity など? | 除外 | BEAT Cancer (2016) |
| Rogers LQ et al.,2017 | RCT | Post-treatment breast | the 3-month Better Exercise | usual care | Self-report (Pittsburgh Sleep | 除外 | BEAT Cancer (2017) |
| Roveda E et al.,2017 | RCT | breast cancer survivors | 3 months of physical activity | control group | anthropometric and body composition | 除外 | 既報あり, DIANA-5 trialの睡眠に特化した論文 |
| Rutledge TL et al.,2014 | RCT | gynecologic cancer survivors | pelvic floor muscle training/beh | usual care | Patient Global Impression | 除外 | 尿失禁改善が主眼の論文 |

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|------------------------------|----------|----------------------------------|--|--|-----------------------------------|----|--|
| Sandmael JA et al.,2017 | RCT | Patients with head and neck | an exercise and nutrition intervention | an exercise and nutrition intervention | | 除外 | 放射線治療中の頭頸部がん患者が対象 |
| Sanft T et al.,2018 | RCT | breast cancer survivors | a 6-month diet and exercise- | usual care | Fasting blood samples, | 除外 | この論文のメインはテロメア長。LEAN trialに症例を追加 |
| Schmidt ME et al.,2017 | RCT | BEATE recruited breast | | | | 除外 | 術後化学療法または放射線治療中の乳がん患者が対象 |
| Schwartz AL et al.,2009 | RCT | newly diagnosed cancer | | | | 除外 | 化学療法中の患者が対象 |
| Scruggs S et al.,2018 | RCT | sedentary breast cancer | a 6-month lifestyle physical | standard care | transtheoretical model (TTM) | 除外 | アウトカムが合っていない |
| Strunk MA et al.,2018 | RCT | Breast cancer survivors | a “Kyusho Jitsu” martial arts | control group | health-related quality of life | 除外 | 「急所術」急所術とは、人間の身体の構造を研究し体の中にある弱点 |
| Taaffe DR et al.,2018 | RCT | patients previously treated for | 6 months supervised exercise | printed physical activity | lower extremity performance | 除外 | 既報あり |
| Thomas EA et al.,2019 | RCT | Female overweight and obese | (b) exercise and nutrition counseling | (a) exercise and nutrition counseling | | 除外 | Mindfulnessに主眼。両群にexercise and nutrition counselingが |
| Trinh L et al.,2014 | RCT | kidney cancer survivors | a 4-week supervised physical | a 4-week supervised PA program | | 除外 | behavioral counselingに主眼。両群にsupervised PA |
| Trinh L et al.,2015 | RCT | kidney cancer survivors | a 4-week supervised physical | a 4-week supervised PA program | | 除外 | 既報あり |
| Vallance JK et al.,2008 | RCT | | | | | 除外 | 既報あり |
| Vallance JK et al.,2008 | RCT | | | | | 除外 | 既報あり |
| Winger JG et al.,2014 | RCT | 641 older, overweight, longterm | diet and exercise intervention | delayed-intervention | Physical funcion, Mental | 除外 | 値抽出不可 |
| Winkels RM et al.,2017 | protocol | 351 breast cancer survivors | 1) exercise (weight training and | control | lymphedema outcomes, biomarkers | 除外 | protocol |
| Winters-Stone KM et al.,2014 | RCT | 295 breast cancer survivors at | twice-weekly progressive | standard care | bone mineral density and diet and | 除外 | 対象アウトカム未測定 |
| Winters-Stone KM et al.,2012 | RCT | 106 older, postmenopausal breast | impact + resistance exercise | a control program of low-intensity | bone mineral density (BMD) at | 除外 | 対象アウトカム未測定, コントロールもストレッチングの介入あり |

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|------------------------------|----------|--------------------------------|--------------------------------|----------------------------------|----------------------------------|----|---------------------|
| Winters-Stone KM et al.,2012 | protocol | 64 couples of prostate cancer | 6 months of partnered strength | usual care | the physical and emotional | 除外 | protcopl |
| Winters-Stone KM et al.,2018 | RCT | 90 women diagnosed with breast | REC plus a cancer-specific | an oncologist verbal | Fatigue, vigor, and depression | 除外 | サバイバーではない |
| Zhang AY et al.,2019 | RCT | 153 prostate cancer survivors | pelvic floor muscle exercises | usual care | the group status, daily leakage | 除外 | 介入が運動ではない |
| Huberty JL et al.,2009 | non-RCT | | | | | 除外 | non-RCT |
| Jacobsen PB et al.,2014 | RCT | 711 hematopoietic cell | a self-directed exercise | neither | the physical (PCS) and mental | 除外 | サバイバーではない |
| Jones LW et al.,2004 | RCT | 450 newly diagnosed breast | receive an oncologist exercise | usual care | self-reported total | 除外 | 対象アウトカム未測定 |
| Jones SB et al.,2013 | RCT | 76 postmenopausal breast | a six-month aerobic exercise | usual care | interleukin (IL)-6, C-reactive | 除外 | 対象アウトカム未測定 |
| Kampshoff CS et al.,2016 | non-RCT | | | | | 除外 | non-RCT |
| Kirkham AA et al.,2013 | non-RCT | | | | | 除外 | non-RCT |
| Knobf MT et al.,2016 | RCT | 154 early postmenopausal FCS | a 12-month aerobic-resistance | a home-based physical | bone outcomes [bone | 除外 | 対象アウトカム未測定 |
| Knobf MT et al.,2017 | RCT | 154 who had completed primary | a fitness center intervention | a home based group | ardiovascular function and | 除外 | 対象アウトカム未測定 |
| Kraaijenga SA et al.,2015 | non-RCT | | | | | 除外 | non-RCT |
| Krisciunas GP et al.,2017 | RCT | 170 HNC survivors | estim +Swallow exercise | sham estim + swallowing exercise | changes in PAS, HNCI, PSS, OPSE, | 除外 | 運動介入ではないのでは。 |
| Kroz M et al.,2017 | RCT | | | | | 除外 | RCT と non-RCT の混合介入 |
| Kwiatkowski F et al.,2017 | RCT | 251 non-metastatic breast | adapted physical activity and | control | QoL | 除外 | 値抽出不可 |
| Latka RN et al.,2009 | non-RCT | | | | | 除外 | non-RCT |

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|-------------------------|----------|--------------------------------------|----------------------------------|--------------------------------|---------------------------------------|----|---|
| Lee CF et al.,2018 | RCT | 223 CRC patients | receive dietary, PA or both | usual care | Primary outcomes included two | 除外 | PA-associated injuries were rare... |
| Lee DH et al.,2013 | RCT | 23 stage II-III colorectal cancer | intensely intervened home-based | casually intervened home-based | The primary outcome was the | 除外 | 対象アウトカム未測定 |
| Ligibel JA et al.,2008 | RCT | 101 sedentary, overweight | a 16-week cardiovascular and | a usual care | Fasting insulin and glucose | 除外 | 対象アウトカム未測定 |
| Liu J et al.,2015 | RCT | 27 postsurgical non-small | Tai Chi 24-type exercise for | the control | the proliferative and | 除外 | 対象アウトカム未測定 |
| Martin E et al.,2016 | RCT | 72 breast cancer survivors | low-to-moderate intensity | continued usual care | Functional Assessment of Cancer | 除外 | 値抽出不可 |
| McGowan EL et al.,2017 | RCT | | | | | 除外 | RCTの一部の二次解析 |
| McGuire R et al.,2011 | non-RCT | | | | | 除外 | non-RCT |
| Edbrooke L et al.,2019 | RCT | 92 lung cancer patients | usual care (UC) plus 8 weeks of | usual care | physical function (functional | 除外 | サバイバーの定義？ |
| Kayambu G et al.,2015 | RCT | 50 critically ill adults admitted to | early physical rehabilitation | usual care | physical function (acute care | 除外 | No session of exercise resulted in an adverse |
| Joachim W et al.,2019 | RCT | 65 pancreatic cancer | supervised progressive RT (RT1), | usual care | Muscle strength for knee, elbow, | 除外 | 治療中 |
| Murnane A et al.,2015 | RCT | | | | | 除外 | 観察研究 |
| Simone M et al.,2019 | RCT | 21 patients with previous breast | WCRF recommendations | general and standardized food | anthropometric, physical and dietary | 除外 | 全員運動している |
| Vollmers PL et al.,2018 | RCT | 36 breast cancer patients | a regular physical training and | an instruction sheet | physical and psychological parameters | 除外 | undergoing |
| Atema V et al.,2019 | RCT | 254 breast cancer survivors | a therapist-guided Internet- | a selfmanaged iCBT | perceived impact of hot flushes | 除外 | 運動介入ではない |
| Christoph E et al.,2018 | non-RCT | | | | | 除外 | non-RCT |
| Haryana M et al.,2012 | protocol | patients with non-resectable | 2-month PA programme | usual care | fatigue and QOL | 除外 | protocol |

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| Meyerhardt JA et al.,2019 | protocol | 139 phase II trial, stage I-III colorectal | exercise or metformin or both | neither | The primary outcome was change | 除外 | プロトコルペーパー |
| Paxton RJ et al.,2017 | RCT | 71 minority breast cancer | the ALIVE program's 3-month | its 3-month dietary track | Physical activity, sedentary | 除外 | 対象アウトカム未測定 |
| Roine E et al.,2020 | RCT | | | | | 除外 | 対象アウトカム未測定,パイロットスタディ |

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| アウトカム | | QoL (FACT, QLQ-C30, SF-36) | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--------|----------------------------|--------|--------|----------|------------|------------|--------|----------|-----|----------------|----|----|-------|-------|-----------|-----------------|-----------|-----------|-----------------|--------------------------|----------|------------------|--|
| 個別研究 | 研究デザイン | バイアスリスク* | | | | | | | | | | | | | | | | | | | | | | |
| | | 選択バイアス | 実行バイアス | 検出バイアス | 症例減少バイアス | その他 | | 非直接性* | | | リスク人数 (アウトカム率) | | | | | | | | | | | | | |
| 研究コード | ランダム化 | コントロールメント | 盲検化 | 盲検化 | ITT | アウトカム不完全報告 | 選択的アウトカム報告 | 早期試験中止 | その他のバイアス | まとめ | 対象 | 介入 | 対照 | アウトカム | 対照群人数 | 対照群変化値の平均 | 対照群変化値のSD | 介入群人数 | 介入群変化値の平均 | 介入群変化値のSD | 効果指標 (種類) | 効果指標 (値) | 信頼区間 | |
| Kinney A et al.,2011 | RCT | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 25 | 1.3 | -1.1, 6.0 | 29 | 3 | 0.7, 9.2 | | | |
| Kinney A et al.,2011 | RCT | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 25 | 3.2 | 0.5, 6.5 | 29 | 1.7 | -6.8, 5.8 | | | |
| Kim JY et al.,2019 | RCT | 0 | 0 | -1 | -1 | 0 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 34 | 1.6 | 11.3 | 37 | 2.9 | 9.2 | SMD | 0.115 | | |
| Zhou Y et al.,2017 | RCT | -1 | 0 | -1 | -1 | 0 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 70 | -2 | CI:4.3 to 0.3 | 74 | 1.8 | CI:-0.4 to 0.9 | SMD | 3.7 | CI 0.7 to 6.8 | |
| Zhou Y et al.,2017 | RCT | -1 | 0 | -1 | -1 | 0 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 70 | 0.5 | CI:-1.9 to 2.9 | 74 | 1.6 | CI:-0.6 to 0.9 | SMD | 1.2 | CI -1.8 to 4.2 | |
| Galliano-Castillo N et al.,2016 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | -4.28 | CI:12.7 to 4.22 | 39 | 14.31 | CI:6.0 to 22.0 | SMD | 18.59 | CI 8.94 to 28.25 | |
| Nyrop KA et al.,2017 | RCT | -2 | -2 | -1 | -1 | 0 | 0 | 0 | 0 | -2 | -1 | 0 | 0 | 0 | 31 | 0.07 | CI:4.28 to 4.42 | 31 | 1.48 | CI:3.32 to 6.27 | SMD | 0.09 | CI -0.47 to 0.65 | |
| Alibhai SM et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 18 | 11.7 | 20.1 | 22 | 0.5 | 12.7 | SMD | -0.56 | | |
| Goodwin PJ et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 167 | 2.3 | 8.8 | 171 | 4.2 | 8.4 | SMD | 0.216 | | |
| Goodwin PJ et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 167 | 1.6 | 9.9 | 171 | 1.7 | 9.7 | SMD | 0.01 | | |
| Goodwin PJ et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 167 | 0.44 | 1.63 | 171 | 0.58 | 1.58 | SMD | 0.086 | | |
| Murtezani A et al.,2014 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 32 | -0.56 | 2.01 | 30 | 9.16 | 2.12 | | | | |
| Courneya KS et al.,2003 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 28 | 0.3 | 8.5 | 24 | 9.1 | 14.1 | | | | |
| Brown JC et al.,2018(Low vs Ctrl) | RCT | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 13 | -4.8 | 10.10 | 14 | 2.8 | 9.73 | | | | |
| Brown JC et al.,2018(High vs Ctrl) | RCT | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 13 | -4.8 | 10.10 | 12 | 2 | 9.70 | | | | |
| Brown JC et al.,2018(Low vs Ctrl) | RCT | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 13 | -7.4 | 16.59 | 14 | -6.2 | 16.09 | | | | |
| Brown JC et al.,2018(High vs Ctrl) | RCT | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 13 | -7.4 | 16.59 | 12 | 5.7 | 15.93 | | | | |
| Brown JC et al.,2018(Low vs Ctrl) | RCT | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 13 | 2.7 | 10.82 | 14 | -0.7 | 10.48 | | | | |
| Brown JC et al.,2018(High vs Ctrl) | RCT | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 13 | 2.7 | 10.82 | 12 | 4.1 | 10.39 | | | | |
| Pisu M et al.,2017 | RCT | -1 | -1 | -1 | -1 | 0 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 16 | -2.11 | 5.89 | 13 | -0.57 | 4.69 | | | | |
| Pisu M et al.,2017 | RCT | -1 | -1 | -1 | -1 | 0 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 16 | -0.67 | 5.53 | 13 | 6.51 | 8.15 | | | | |
| Bourke L et al.,2011 | RCT | 0 | 0 | -1 | -1 | 0 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 9 | 4 | 4.08 | 9 | 0 | 1.53 | | | | |
| Broderick JM et al.,2013 | RCT | 0 | 0 | -1 | -1 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 19 | 4.2 | 0.2 to 8.2 | 21 | 4.8 | 0.7 to 8.8 | | | | |
| Broderick JM et al.,2013 | RCT | 0 | 0 | -1 | -1 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 19 | 2.6 | 0.2 to 4.9 | 21 | 3.7 | 0.5 to 7.9 | | | | |
| Culos-Reed SN et al.,2010 | RCT | -1 | -1 | -1 | -1 | 0 | -2 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 47 | -2.33 | 0.88 | 53 | 2.7 | 0.92 | | | | |
| McNeil J et al.,2019 | RCT | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 13 | -1.9 | -9.1 to 5.2 | 15 | -3.7 | -10.4 to 3.0 | Between group difference | -1.80 | -11.6 to 8.1 | |
| McNeil J et al.,2019 | RCT | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 13 | -1.9 | -9.1 to 5.2 | 15 | -1.1 | -7.8 to 5.7 | Between group difference | 0.90 | -8.9 to 10.7 | |
| Milne HM et al.,2008 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 29 | -3 | -6.4 to 0.2 | 29 | 12.6 | 7.8 to 17.4 | | | | |
| Plinto BM et al.,2013 | RCT | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 26 | 5.5 | 0.8 to 10.1 | 20 | 6.0 | 0.6 to 11.3 | | | | |

| 個別研究 | | 倦怠感 | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|-------|----------|--------|--------|----------|------------|------------|--------|----------|-----|----------------|----|----|-------|-----|-------|-----------|-------|-------------|-----------|--------|------------------|--------------------------|---------|------------------|
| | | バイアスリスク* | | | | | | | | | | | | | | | | | | | | | | | |
| | | 選択バイアス | 実行バイアス | 検出バイアス | 症例減少バイアス | その他 | | 非直接性* | | | リスク人数 (アウトカム率) | | | | | | | | | | | | | | |
| 研究デザイン | ランダム化 | コントロール | 盲検化 | 盲検化 | ITT | アウトカム不完全報告 | 選択的アウトカム報告 | 早期試験中止 | その他のバイアス | まとめ | 対象 | 介入 | 対照 | アウトカム | まとめ | 対照群人数 | 対照群変化値の平均 | 対照群SD | 介入群人数 | 介入群変化値の平均 | 介入群SD | 介入群変化値のSD | 効果指標(種類) | 効果指標(値) | 信頼区間 |
| Arroyo-Morales M et al.,2012 | RCT | 0 | 0 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | -1.93 | -5.06,0.20 | 38 | -8.03 | -11.19,-4.86 | MD | -6.1 | -9.12,-1.07 |
| Canterero-Villanueva I et al.,2013 | RCT | 0 | 0 | 0 | -1 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0.34 | -0.19,0.87 | 32 | -2.0 | -2.63,-1.37 | MD | -2.34 | -3.14,-1.53 |
| Campbell KL et al.,2018 | RCT | 0 | -1 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 9 | 0.5 | 11.4 | 10 | 4.7 | 10.1 | | | |
| Canterero-Villanueva I et al.,2011 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0.15 | -0.22,0.72 | 38 | -2.34 | -3.18,-1.59 | MD | -2.49 | -4.00,-2.17 |
| Rabin C et al.,2011 | RCT | 0 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | -3.3 | 5.68 | 8 | -11.43 | 11.65 | | | |
| Kim JY et al.,2019 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 1.2 | 5.4 | 37 | 2.7 | 6.7 | SMD | 0.2778 | |
| Zhou Y et al.,2017 | RCT | -1 | 0 | -1 | -1 | 0 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 70 | 1.2 | 0.11,0.35 | 74 | 4 | 0.18,0.62 | SMD | 2.8 | CI -0.2 to 5.7 |
| Nyrop KA et al.,2017 | RCT | -2 | -2 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -2 | -1 | 0 | 0 | 0 | 31 | 0.45 | 0.03,0.153 | 31 | 0.63 | CI -0.53 to 1.82 | d | 0.06 | CI -0.53 to 0.65 |
| Alibhai SM et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 18 | 3.1 | 9.3 | 22 | 2.3 | 7.8 | SMD | -0.086 | |
| Rogers LQ et al.,2015a | RCT | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 24 | -1.1 | 6.4 | 20 | -3.8 | 4.1 | | | |
| Brown JC et al.,2018 | RCT | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 13 | 0.1 | 2.5 | 14 | 0.9 | 2.4 | | | |
| Brown JC et al.,2018 | RCT | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 13 | 0.1 | 2.5 | 12 | -5.9 | 2.6 | | | |
| Bourke L et al.,2011 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 1 | 1.53 | 9 | 5 | 1.53 | | | |
| Broderick JM et al.,2013 | RCT | 0 | 0 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 19 | 2.3 | 2.8 | 21 | 6.2 | 4.1 | | | |
| Broderick JM et al.,2013 | RCT | 0 | 0 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 19 | 6.5 | 5.2 | 21 | 11 | 7.6 | | | |
| Culos-Reed SN et al.,2010 | RCT | -1 | -1 | -1 | -1 | 0 | -2 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 24 | -0.04 | 1.1 | 37 | -0.34 | 1.6 | | | |
| Milne HM et al.,2008 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 29 | -0.5 | -2.2 to 1.3 | 29 | -2.7 | -4.1 to -1.4 | | | |
| Pinto BM et al.,2013 | RCT | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 20 | 2.8 | 0.4 to 5.1 | 26 | 3.1 | 0.3 to 5.9 | | | |
| Rogers LQ et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | -0.1 | 1.9 | 22 | 0.4 | 1.9 | Between group difference | 0.6 | SD 1.9 |
| Vallance JK et al.,2007 | RCT | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 96 | 1.3 | 0.4 to 2.9 | 94 | 1.8 | 0.1 to 3.5 | Between group difference | 0.5 | -1.9 to 2.9 |
| Vallance JK et al.,2007 | RCT | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 96 | 1.3 | 0.4 to 2.9 | 94 | 2.5 | 0.8 to 4.1 | Between group difference | 1.2 | -1.1 to 3.5 |
| Vallance JK et al.,2007 | RCT | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 96 | 1.3 | 0.4 to 2.9 | 93 | 3.6 | 1.9 to 5.3 | Between group difference | 2.3 | 0.0 to 4.7 |
| Yang Z et al.,2017 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 70 | 1.2 | -1.1~-3.5 | 74 | 4 | 1.8~-6.2 | | | |

CQ1

| アウトカム | | うつ (BDI, HADS, CES-D) | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--------|-----------------------|--------|--------|----------|------------|------------|--------|----------|-----|----|----------------|----|-------|-------|-----------|-----------|-------|-----------|-----------|-----------|----------|------|
| 個別研究 | 研究デザイン | バイアスリスク* | | | | | | | | | | | | | | | | | | | | | |
| | | 選択バイアス | 実行バイアス | 検出バイアス | 症例減少バイアス | その他 | | | 非直接性* | | | リスク人数 (アウトカム率) | | | | | | | | | | | |
| 研究コード | ランダム化 | コンソルメント | 盲検化 | 盲検化 | ITT | アウトカム不完全報告 | 選択的アウトカム報告 | 早期試験中止 | その他のバイアス | まとめ | 対象 | 介入 | 対照 | アウトカム | 対照群人数 | 対照群変化値の平均 | 対照群変化値のSD | 介入群人数 | 介入群変化値の平均 | 介入群変化値のSD | 効果指標 (種類) | 効果指標 (値) | 信頼区間 |
| Saxton JM et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 41 | -2.3 | 5.8 | 44 | -6.1 | 6.9 | | | |
| Campbell KL et al.,2018 | RCT | 0 | -1 | -1 | -1 | 0 | 0 | -1 | 0 | -1 | 0 | 0 | 0 | 0 | 9 | -0.3 | 1.3 | 10 | -1.3 | 3 | | | |
| Alibhai SM et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 18 | -0.3 | 2.5 | 22 | 0 | 2.7 | SMD | 0.12 | |
| Carter SJ et al.,2018 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 11 | 0.5 | 1.3 | 16 | -2.4 | 4.2 | | | |
| Culos-Reed SN et al.,2010 | RCT | -1 | -1 | -1 | -1 | 0 | -2 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 24 | 0.96 | 4.86 | 37 | -0.4 | 4.7 | | | |

| アウトカム | | 有事事象 | | | | | | | | | | | 非直接性* | | | | | | リスク人数 (アウトカム率) | | | | | | | | | | | | |
|--------|-----------------------------------|--------|--------------------------|-----|-----|--------|------------|------------|--------|----------|-----|----|-------|----|-------|-----|-------|-----------|----------------|-----------|-----------|----------|------|--|-----|--|--|----|--|--|-------|
| | | 選択ハイアス | | | | 実行ハイアス | | | | ハイアスリスク* | | | その他 | | | まとめ | | | 対照 | | | アウトカム | | | まとめ | | | 対照 | | | アウトカム |
| 研究デザイン | 研究コード | ランダム化 | コンソールメント | 盲検化 | 盲検化 | ITT | アウトカム不完全報告 | 選択的アウトカム報告 | 早期試験中止 | その他のハイアス | まとめ | 対象 | 介入 | 対照 | アウトカム | まとめ | 対照群分子 | 対照群分子 (%) | 介入群分子 | 介入群分子 (%) | 効果指標 (種類) | 効果指標 (値) | 信頼区間 | | | | | | | | |
| | | RCT | Kampshoff CS et al.,2015 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 91 | 0 | 91 | 0 | | | | | | | | | |
| RCT | Kampshoff CS et al.,2015 | 0 | 0 | -1 | -1 | 0 | -1 | 0 | -1 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | 95 | 0 | | | | | | | | | | | |
| RCT | Kenfield SA et al.,2019 | 0 | 0 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | -1 | 39 | 18 | 37 | 25 | | | | | | | | | | | |
| RCT | Arroyo-Morales M et al.,2012 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 40 | 0 | 37 | 0 | | | | | | | | | | | |
| RCT | Strunk MA et al.,2017 | -1 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 16 | 0 | | | | | | | | | | | |
| RCT | Sweeney FC et al.,2018 | 0 | 0 | -1 | -1 | -1 | 0 | 0 | -1 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 0 | | | | | | | | | | | |
| RCT | Galvao DA et al.,2014 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 48 | 2 | 57 | 2 | | | | | | | | | | | |
| RCT | Galvao DA et al.,2014 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 48 | 2 | 54 | 1 | | | | | | | | | | | |
| RCT | Kinney A et al.,2011 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 25 | 0 | 29 | 0 | | | | | | | | | | | |
| RCT | O'Neill RF et al.,2015 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | -1 | 47 | 0 | 47 | 3 | | | | | | | | | | | |
| RCT | Burnham TR et al.,2002 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | | | | | | | | | | | |
| RCT | Burnham TR et al.,2002 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | | | | | | | | | | | |
| RCT | Cantareo-Villanueva I et al.,2016 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 19 | 1 | 21 | 9 | | | | | | | | | | | |
| RCT | Cantareo-Villanueva I et al.,2013 | 0 | 0 | -1 | -1 | -1 | 0 | 0 | -1 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 32 | 3.0 | | | | | | | | | | | |
| RCT | Winters-Stone KM et al.,2014 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | -1 | 0 | -1 | 22 | 0 | 29 | 2.0 | | | | | | | | | | | |
| RCT | Campbell KL et al.,2018 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 10 | 0 | | | | | | | | | | | |
| RCT | Cantareo-Villanueva I et al.,2011 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 38 | 3 | | | | | | | | | | | |
| RCT | Casia S et al.,2015 | 0 | 0 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | -1 | 44 | 0 | 45 | 0 | | | | | | | | | | | |
| RCT | Mulero PA et al.,2008 | 0 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 0 | -1 | -1 | 0 | 0 | -2 | -2 | 9 | 0 | 16 | 4 | | | | | | | | | | | |
| RCT | Mulero PA et al.,2008 | 0 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 0 | -1 | -1 | 0 | 0 | -2 | -2 | 9 | 0 | 19 | 6 | | | | | | | | | | | |
| RCT | Diehl-Conwright CM et al.,2018a | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 50 | 0 | 50 | 0 | | | | | | | | | | | |
| RCT | Zhou Y et al.,2017 | -1 | 0 | -1 | -1 | 0 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 70 | 0 | 74 | 0 | | | | | | | | | | | |
| RCT | Adams SC et al.,2018 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 35 | 0 | | | | | | | | | | | |
| RCT | Brown JC et al.,2018 | 0 | 0 | -1 | 0 | 0 | -2 | 0 | -1 | 0 | -1 | -1 | 0 | 0 | -1 | -2 | 25 | 0 | 23 | 0 | | | | | | | | | | | |
| RCT | Luca DV et al.,2016 | 0 | -2 | -1 | -1 | 0 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 0 | | | | | | | | | | | |
| RCT | Nyrop KA et al.,2017 | -2 | -2 | -1 | -1 | 0 | 0 | 0 | 0 | -2 | -1 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 31 | 0 | | | | | | | | | | | |
| RCT | Alibhai SM et al.,2014 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 22 | 0 | | | | | | | | | | | |
| RCT | Banath M et al.,2015 | -2 | -2 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | -2 | -1 | 0 | 0 | 0 | 0 | 12 | 0 | 20 | 0 | | | | | | | | | | | |
| RCT | Brown JC et al.,2012 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 70 | 0 | 59 | 6 | | | 10.1 | | | | | | | | |
| RCT | Brown JC et al.,2012 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 77 | 0 | 59 | 2 | | | 3.4 | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-----|----|----|----|----|----|----|----|----|---|----|----|----|----|---|----|---|---|---|-----|----|-----|-----|-----|------|------|-----|---|
| Doan LB et al.,2016 | RCT | -2 | -2 | -1 | -2 | -2 | -1 | -1 | 0 | 0 | -2 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 12 | 0 | 0 | 0 |
| Doan LB et al.,2016 | RCT | -2 | -2 | -1 | -2 | -2 | -1 | -1 | 0 | 0 | -2 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 11 | 0 | 0 | 0 |
| Giallauria F et al.,2014 | RCT | -2 | -2 | -1 | 0 | -1 | -1 | -1 | 0 | 0 | -2 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 61 | 0 | 0 | 0 |
| Johnston MF et al.,2011 | RCT | 0 | 0 | -1 | -1 | -2 | -1 | -1 | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 5 | 0 | 0 | 0 |
| Courneya KS et al.,2003 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 2 | 7% | 2 | 24 | 5 | 21% | 21% | |
| Fairley AS et al.,2005 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 2 | 7% | 2 | 24 | 5 | 21% | 21% | |
| Gaskin CJ et al.,2017 | RCT | 0 | -1 | -1 | -1 | 0 | -2 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 14% | 1 | 8 | 1 | 13% | 13% | |
| O'Neill LM et al.,2018 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0% | 0 | 21 | 5 | 24% | 24% | |
| LaStayo PC et al.,2011 | RCT | -1 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -2 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0% | 0 | 20 | 0 | 0% | 0% | |
| Broderick JM et al.,2013 | RCT | 0 | 0 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0% | 0 | 23 | 1 | 4% | 4% | |
| Crawford JJ et al.,2017 | RCT | 0 | 0 | -1 | -1 | 0 | -1 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0% | 0 | 24 | 1 | 4% | 4% | |
| Gaskin CJ et al.,2016 | RCT | 0 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 1 | 1.5 | 53 | 1 | 1.9 | 1 | 1.9 | |
| Greenlee HA et al.,2013 | RCT | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0.0 | 22 | 2 | 2 | 9.1 | 9.1 | |
| Rogers LQ et al.,2015b | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 2 | 1.8 | 110 | 20 | 18.2 | 18.2 | | |
| Rogers LQ et al.,2013 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0.0 | 15 | 2 | 13.3 | 13.3 | | |
| Rogers LQ et al.,2009 | RCT | 0 | 0 | -1 | -2 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0.0 | 21 | 0 | 0.0 | 0.0 | | |
| Rogers LQ et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 2 | 8.3 | 22 | 2 | 9.1 | 9.1 | | |
| Sandel SL et al.,2005 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0.0 | 19 | 0 | 0.0 | 0.0 | | |
| Scott E et al.,2013 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 0.0 | 47 | 0 | 0.0 | 0.0 | | |
| Waltman NL et al.,2010 | RCT | -1 | -1 | -1 | -1 | -1 | 0 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 125 | 0 | 0 | 0 | 124 | 0 | 0 | 0 | |
| Winters-Stone KM et al.,2011 | RCT | -1 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | -1 | 0 | -2 | 0 | -2 | 0 | 0 | 0 | 54 | 0 | 0 | 0 | 52 | 0 | 0 | 0 | |
| Irwin ML et al.,2008 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 0 | 37 | 2 | 2 | 2 | |
| Irwin ML et al.,2017 | RCT | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | 0 | 0 | 95 | 0 | 0 | 0 | |
| Johansson K et al.,2013 | RCT | 0 | -1 | -1 | 0 | -1 | 0 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | |
| Kim SH et al.,2016 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | |
| Kim SH et al.,2018 | RCT | 0 | 0 | -1 | 0 | -1 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | -2 | 0 | -2 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | |
| Lee MK et al.,2018 | RCT | 0 | -1 | -1 | -1 | 0 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 38 | 0 | 0 | 0 | |
| Brown JC et al.,2015 | RCT | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 147 | 0 | 0 | 0 | 148 | 0 | 0 | 0 | |
| Yang Z et al.,2017 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 0 | 0 | 0 | 74 | 0 | 0 | 0 | |
| Scott C et al.,2018 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | |
| Dieli-Conwright CM et al.,2018 | RCT | -1 | 0 | -1 | -1 | -1 | -1 | 0 | -1 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | |
| Dieli-Conwright CM et al.,2018 | RCT | 0 | 0 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 0 | 0 | 50 | 0 | 0 | 0 | |

| アウトカム | | QoL (FACT, QLQ-C30, SF-36) | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--------|----------------------------|--------|--------|----------|------------|--------|----------|-----|----|----|-------|-------|----------------|-----------|-----------|---------------|-----------|-------|-----------------|--------------------------|-------|------------------|
| 個別研究 | 研究デザイン | バイアスリスク* | | | | | | | | | | 非直接性* | | リスク人数 (アウトカム率) | | | | | | 効果指標 (種類) | 効果指標 (値) | 信頼区間 | |
| | | 選択バイアス | 実行バイアス | 検出バイアス | 症例減少バイアス | 選択的アウトカム報告 | 早期試験中止 | その他のバイアス | まとめ | 対象 | 介入 | 対照 | アウトカム | 対照群変化値の平均 | 対照群変化値のSD | 介入群変化値の平均 | 介入群変化値のSD | 介入群変化値のSD | | | | | |
| Kinney A et al.,2011 | RCT | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 25 | 3.2 | 0.5, 6.5 | 29 | 1.7 | -6.8, 5.8 | | | |
| Kim JY et al.,2019 | RCT | 0 | 0 | -1 | 0 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 34 | 1.6 | 11.3 | 37 | 2.9 | 9.2 | SMD | 0.12 | |
| Zhou Y et al.,2017 | RCT | -1 | 0 | -1 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 70 | -2 | CI:4.3 to 0.3 | 74 | 1.8 | CI:0.4 to 3.9 | SMD | 3.70 | CI 0.7 to 6.8 |
| Nyrop KA et al.,2017 | RCT | -2 | -1 | -1 | 0 | 0 | 0 | -2 | -1 | 0 | 0 | 0 | 0 | 0 | 31 | 0.07 | CI:4.2 to 4.2 | 31 | 1.48 | CI:3.32 to 6.27 | SMD | 0.09 | CI -0.47 to 0.65 |
| Alibhai SM et al.,2014 | RCT | 0 | 0 | -1 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 18 | 11.7 | 20.1 | 22 | 0.5 | 12.7 | SMD | -0.56 | |
| Goodwin PJ et al.,2014 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 167 | 0.44 | 1.63 | 171 | 0.58 | 1.58 | SMD | 0.09 | |
| Murtezani A et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 32 | -0.81 | 2.52 | 30 | 13.4 | 2.74 | | | |
| Courneya KS et al.,2003 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 28 | 0.3 | 8.5 | 24 | 9.1 | 14.1 | | | |
| Pisu M et al.,2017 | RCT | -1 | -1 | -1 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 16 | -2.11 | 5.89 | 13 | -0.57 | 4.69 | | | |
| Bourke L et al.,2011 | RCT | 0 | 0 | -1 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 9 | 4 | 4.08 | 9 | 0 | 1.53 | | | | |
| Broderick JM et al.,2013 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 19 | 4.2 | 0.2 to 8.2 | 21 | 4.8 | 0.7 to 8.8 | | | |
| Culos-Reed SN et al.,2010 | RCT | -1 | -1 | -1 | 0 | -2 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 47 | -2.33 | 0.88 | 53 | 2.7 | 0.92 | | | |
| McNeil J et al.,2019 | RCT | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 13 | -1.9 | -9.1 to 5.2 | 15 | -1.1 | -7.8 to 5.7 | Between group difference | 0.90 | -8.9 to 10.7 |
| Milne HM et al.,2008 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 29 | -3 | -6.4 to 0.2 | 29 | 12.6 | 7.8 to 17.4 | | | |
| Pinto BM et al.,2013 | RCT | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 26 | 5.5 | 0.8 to 10.1 | 20 | 6.0 | 0.6 to 11.3 | | | |
| Scott E et al.,2013 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 43 | 5.1 | 10.7 | 47 | 13.3 | 14.8 | | | |
| Vallance JK et al.,2007 | RCT | 0 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 96 | 1.1 | -3.7 to 1.3 | 93 | 6.9 | 4.2 to 9.6 | Between group difference | 5.80 | 2.0 to 9.6 |
| Yang Z et al.,2017 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 70 | -2 | -4.3~-0.3 | 74 | 1.8 | -0.4~-3.9 | | | |

| アウトカム | | 倦怠感 | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--------|----------|--------|--------|----------|------------|--------|----------|----|----|-------|-----|-------|-----------|----------------|-----------|-----------|-----------|-----------|--------------|-----------|----------|--------------|--------------------------|-------|------------------|
| 個別研究 | 研究デザイン | バイアスリスク* | | | | | | | | | | | 非直接性* | | リスク人数 (アウトカム率) | | | | | | 効果指標 (種類) | 効果指標 (値) | 信頼区間 | | | |
| | | 選択バイアス | 実行バイアス | 検出バイアス | 症例減少バイアス | 選択的アウトカム報告 | 早期試験中止 | その他のバイアス | 対照 | 介入 | アウトカム | まとめ | 対照群人数 | 対照群変化値の平均 | 対照群変化値のSD | 介入群変化値の平均 | 介入群変化値のSD | 介入群変化値の平均 | 介入群変化値のSD | | | | | | | |
| Kim JY et al.,2019 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 1.2 | 5.4 | 37 | 2.7 | 6.7 | SMD | 0.28 | |
| Zhou Y et al.,2017 | RCT | -1 | 0 | -1 | 0 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 1.2 | 0.1 to 3.5 | 74 | 4 | 0.1 to 6.2 | SMD | 2.80 | CI -0.2 to 5.7 |
| Nyrop KA et al.,2017 | RCT | -2 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0.45 | 0.03 to 1.53 | 31 | 0.63 | 0.05 to 1.82 | d | 0.06 | CI -0.53 to 0.65 |
| Alibhai SM et al.,2014 | RCT | 0 | 0 | -1 | 0 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 3.1 | 9.3 | 22 | 2.3 | 7.8 | SMD | -0.09 | |
| Rogers LQ et al.,2015 | RCT | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | -1.1 | 6.4 | 20 | -3.8 | 4.1 | | | |
| Bourke L et al.,2011 | RCT | 0 | 0 | -1 | 0 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 5 | 1.53 | 9 | 1 | 1.53 | | | |
| Broderick JM et al.,2013 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 2.3 | 2.8 | 21 | 6.2 | 4.1 | | | |
| Culos-Reed SN et al.,2010 | RCT | -1 | -1 | -1 | 0 | -2 | -1 | 0 | 0 | -2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | -0.04 | 1.1 | 37 | -0.34 | 1.6 | | | |
| Milne HM et al.,2008 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | -0.5 | -2.2 to 1.3 | 29 | -2.7 | -4.1 to -1.4 | | | |
| Pinto BM et al.,2013 | RCT | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 2.8 | 0.4 to 5.1 | 26 | 3.1 | 0.3 to 5.9 | | | |
| Rogers LQ et al.,2014 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | -0.1 | 1.9 | 22 | 0.4 | 1.9 | Between group difference | 0.60 | SD 1.9 |
| Vallance JK et al.,2007 | RCT | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 1.3 | 0.4 to 2.9 | 93 | 3.6 | 1.9 to 5.3 | Between group difference | 2.30 | 0.0 to 4.7 |
| Yang Z et al.,2017 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 1.2 | -1.1~3.5 | 74 | 4 | 1.8~6.2 | | | |

CQ2

| アウトカム | | うつ (BDI, HADS, CES-D) | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--------|-----------------------|--------|--------|----------|------------|------------|--------|----------|-----|----|----------------|----|-------|-----|-------|-----------|-----------|-------|-----------|-----------|-----------|----------|------|
| 個別研究 | 研究デザイン | バイアスリスク* | | | | | | | | | | | | | | | | | | | | | | |
| | | 選択バイアス | 実行バイアス | 検出バイアス | 症例減少バイアス | その他 | | | 非直達性* | | | リスク人数 (アウトカム率) | | | | | | | | | | | | |
| 研究コード | ランダム化 | コンソルメント | 盲検化 | 盲検化 | ITT | アウトカム不完全報告 | 選択的アウトカム報告 | 早期試験中止 | その他のバイアス | まとめ | 対象 | 介入 | 対照 | アウトカム | まとめ | 対照群人数 | 対照群変化値の平均 | 対照群変化値のSD | 介入群人数 | 介入群変化値の平均 | 介入群変化値のSD | 効果指標 (種類) | 効果指標 (値) | 信頼区間 |
| Saxton JM et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | -1 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 41 | -2.3 | 5.8 | 44 | -6.1 | 6.9 | | | |
| Alibhai SM et al.,2014 | RCT | 0 | 0 | -1 | -1 | 0 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 18 | -0.3 | 2.5 | 22 | 0 | 2.7 | SMD | 0.12 | | |
| Carter SJ et al.,2018 | RCT | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 11 | 0.5 | 1.3 | 16 | -2.4 | 4.2 | | | | |
| Culos-Reed SN et al.,2010 | RCT | -1 | -1 | -1 | -1 | 0 | -2 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 24 | 0.96 | 4.86 | 37 | -0.4 | 4.7 | | | | |

CQ2

| アウトカム | | 認知機能 | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|--------|----------|----------|--------|----------|-----|------------|------------|--------|----------|----|-------|-------|----------------|-------|-----------|-----------|-------|-----------|-----------|-----------|----------|------|--|
| | | バイアスリスク* | | | | | | | | | | 非直接性* | | リスク人数 (アウトカム率) | | | | | | | | | | |
| 個別研究 | 研究デザイン | 選択バイアス | 実行バイアス | 検出バイアス | 症例減少バイアス | その他 | | | | 対象 | 介入 | 対照 | アウトカム | まとめ | 対照群人数 | 対照群変化値の平均 | 対照群変化値のSD | 介入群人数 | 介入群変化値の平均 | 介入群変化値のSD | 効果指標 (種類) | 効果指標 (値) | 信頼区間 | |
| | | ランダム化 | コンソールメント | 盲検化 | 盲検化 | ITT | アウトカム不完全報告 | 選択的アウトカム報告 | 早期試験中止 | その他のバイアス | | | | | | | | | | | | | | |
| Myers JS et al., 2018 | RCT | 0 | 0 | -1 | -1 | -1 | -1 | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 11 | -0.73 | 9.87 | 19 | 10.94 | 10.47 | | | |

| アウトカム | | ADL | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|--------|----------|----------|--------|----------|-----|------------|------------|--------|----------|----|-------|-------|----------------|-------|-----------|-----------|---------|-----------|-----------|-----------|----------|------|--|
| | | バイアスリスク* | | | | | | | | | | 非直接性* | | リスク人数 (アウトカム率) | | | | | | | | | | |
| 個別研究 | 研究デザイン | 選択バイアス | 実行バイアス | 検出バイアス | 症例減少バイアス | その他 | | | | 対象 | 介入 | 対照 | アウトカム | まとめ | 対照群人数 | 対照群変化値の平均 | 対照群変化値のSD | 介入群人数 | 介入群変化値の平均 | 介入群変化値のSD | 効果指標 (種類) | 効果指標 (値) | 信頼区間 | |
| | | ランダム化 | コンソールメント | 盲検化 | 盲検化 | ITT | アウトカム不完全報告 | 選択的アウトカム報告 | 早期試験中止 | その他のバイアス | | | | | | | | | | | | | | |
| Fagevik OM et al., 2017 | RCT | 0 | 0 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 22 | 3.8 | -35.100 | 20 | 0 | -6.32 | | | |

| アウトカム | | 有事事象 | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|--------|----------|--------|--------|----------|------------|--------|----------|-----|----|----|-------|-------|----------------|-----------|-------|-----------|-----------|----------|------|---|
| 個別研究 | 研究デザイン | バイアスリスク* | | | | | | | | | | 非直接性* | | リスク人数 (アウトカム率) | | | | | | | |
| | | 選択バイアス | 実行バイアス | 検出バイアス | 症例減少バイアス | 選択的アウトカム報告 | 早期試験中止 | その他のバイアス | まとめ | 対象 | 介入 | 対照 | アウトカム | 対照群分子 | 対照群分子 (%) | 介入群分子 | 介入群分子 (%) | 効果指標 (種類) | 効果指標 (値) | 信頼区間 | |
| 研究コード | | | | | | | | | | | | | | | | | | | | | |
| Kamshoff CS et al.,2015 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kenfield SA et al.,2019 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Strunk MA et al.,2017 | RCT | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sweeney FC et al.,2018 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Galvao DA et al.,2014 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kinney A et al.,2011 | RCT | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O'Neill RF et al.,2015 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cantareo-Villanueva I et al.,2016 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Winters-Stone KM et al.,2014 | RCT | 0 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Casia S et al.,2015 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mulero PA et al.,2008 | RCT | 0 | -1 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dieli-Conwright CM et al.,2018 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Zhou Y et al.,2017 | RCT | -1 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brown JC et al.,2018 | RCT | 0 | 0 | -1 | 0 | -2 | 0 | -1 | 0 | -1 | -1 | -1 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nyrop KA et al.,2017 | RCT | -2 | -2 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alibhai SM et al.,2014 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Baruth M et al.,2015 | RCT | -2 | -2 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brown JC et al.,2012 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dolan LB et al.,2016 | RCT | -2 | -2 | -1 | -2 | -2 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Giallauria F et al.,2014 | RCT | -2 | -2 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Johnston MF et al.,2011 | RCT | 0 | 0 | -1 | -1 | -1 | -2 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Courneya KS et al.,2003 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fairley AS et al.,2005 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gaskin CJ et al.,2017 | RCT | 0 | -1 | -1 | -1 | 0 | -2 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O'Neill LM et al.,2018 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LaStayo PC et al.,2011 | RCT | -1 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -2 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Broderick JM et al.,2013 | RCT | 0 | 0 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Crawford JJ et al.,2017 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gaskin CJ et al.,2016 | RCT | 0 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Greenlee HA et al.,2013 | RCT | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rogers LQ et al.,2015 | RCT | 0 | 0 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rogers LQ et al.,2013 | RCT | 0 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

■エビデンス総体

CG1

| | |
|----------|--|
| 診療ガイドライン | 「がんサバイバーシップガイドライン 国立がん研究センター編」(Cancer survivorship guideline, National Cancer Center Japan edition) 身体活動・運動編 |
| 対象 | 18～64歳のがんサバイバー |
| 介入 | 運動・身体活動 |
| 対照 | 運動・身体活動なし |

エビデンスの強さはRCTは“強(A)”からスタート、観察研究は“強(C)”からスタート
 *各ドメインは“高(2)”“中/疑い(-1)”“低(0)”の3段階
 **エビデンスの強さは“強(A)”“中(B)”“弱(C)”“非常に弱(D)”の4段階
 ***重要性はアウトカムの重要性(1～9)

エビデンス総体

| アウトカム | 研究デザイン/研究数 | リスク人数 (アウトカム率) | | | | | | | | | | エビデンスの強さ *** | 重要性 *** | コメント | | | | |
|-------|------------|----------------|-----------|------|-----------|--------------------|-----------------|-----------|-----------|-----|-----------|-----------------|------------|-------|----------------|----------|--------------|-------------|
| | | バイアス リスク* | 非一貫性 * | 不精確* | 非直接性 * | その他 (出版バイアスなど)* | 上昇要因 (観察研究)* | 対照群分 母 | 対照群分 子 | (%) | 介入群分 母 | | | | 介入群分 子 | (%) | 効果指標 (種類) | 効果指標 総合値 |
| 全生存期間 | RCT/1 | -1 | 0 | -1 | -1 | -1 | 167 | 10 | 0.06 | 171 | 9 | 0.053 | HR | 0.86 | 0.35 to 2.14 | 非常に弱 (D) | 7 | 重要度8点 |
| 持久性体力 | RCT/18 | -1 | -1 | -1 | 0 | -1 | 356 | | | 393 | | | SMD | 0.65 | 0.34 to 0.95 | 中 (B) | 7 | 重要度7点 |
| 筋力 | RCT/9 | -1 | -1 | -1 | 0 | 0 | 169 | | | 189 | | | SMD | 0.79 | 0.22 to 1.36 | 中 (B) | 6 | 重要度6点 |
| QOL | RCT/19 | -1 | -1 | -1 | 0 | -1 | 810 | | | 831 | | | SMD | 0.68 | 0.27 to 1.09 | 中 (B) | 8 | 重要度7点 |
| 倦怠感 | RCT/18 | -1 | -1 | -1 | 0 | -1 | 596 | | | 621 | | | SMD | -0.48 | -0.70 to -0.26 | 中 (B) | 7 | 重要度6点 |
| 有害事象 | RCT/21 | -1 | 0 | -1 | 0 | 0 | 712 | | | 716 | | | RR | 2.83 | 1.79 to 4.45 | 中 (B) | 6 | 重要度6点 |
| うつ | RCT/5 | -1 | 0 | -1 | 0 | -1 | 103 | | | 129 | | | SMD | -0.39 | -0.68 to -0.10 | 弱 (C) | 6 | 重要度6点 |

CQ 2

| | |
|----------|--|
| 診療ガイドライン | 「がんサバイバーシップガイドライン 国立がん研究センター編」(Cancer survivorship guideline, National Cancer Center Japan edition) 身体活動・運動編 |
| 対象 | 65歳以上のがんサバイバー |
| 介入 | 運動・身体活動 |
| 対照 | 運動・身体活動なし |

エビデンスの強さはRCTは“強(A)”からスタート、観察研究は“弱(C)”からスタート
 *各ドメインは“高(2)”“中/疑い(1)”“低(0)”の3段階
 **エビデンスの強さは“強(A)”“中(B)”“弱(C)”“非常に弱(D)”の4段階
 ***重要性はアウトカム的重要性(1~9)

| エビデンス総体 | アウトカム | リスク人数 (アウトカム率) | | | | | | | | | | | エビデンスの強さ*** | 重要性** | コメント | | | | | | |
|---------|-------|----------------|----------|-------|------|-------|----------------|-------------|-------|-----------|-------|-----------|-------------|-------|------|----------|----------------|---------|---|-------|-------|
| | | 研究デザイン/研究数 | バイアスリスク* | 非一貫性* | 不精確* | 非直接性* | その他(出版バイアスなど)* | 上昇要因(観察研究)* | 対照群分母 | 対照群分母 (%) | 介入群分母 | 介入群分母 (%) | | | | 効果指標(種類) | 効果指標総合値 | 信頼区間 | | | |
| 全生存期間 | | RCT/1 | -1 | 0 | -1 | -1 | -1 | | 167 | 10 | 0.06 | 171 | 9 | 0.053 | HR | 0.86 | 0.35 to 2.14 | 非常に弱(D) | 6 | 重要度8点 | |
| QOL | | RCT/18 | -1 | -1 | -1 | 0 | -1 | | 773 | | | 792 | | | SMD | 0.68 | 0.25 to 1.11 | 中(B) | 8 | 重要度8点 | |
| 倦怠感 | | RCT/13 | -1 | 0 | -1 | 0 | 0 | | 488 | | | 495 | | | SMD | -0.30 | -0.49 to -0.10 | 中(B) | 7 | 重要度6点 | |
| 有害事象 | | RCT/19 | -1 | 0 | -1 | 0 | 0 | | 643 | | | 646 | | | RR | 2.77 | 1.72 to 4.47 | 中(B) | 6 | 重要度6点 | |
| うつ | | RCT/4 | -1 | 0 | -1 | 0 | -1 | | 94 | | | 119 | | | SMD | -0.39 | -0.74 to -0.03 | 弱(C) | 6 | 重要度6点 | |
| 認知機能 | | RCT/1 | -1 | 0 | -1 | -1 | -1 | | 11 | -0.73 | 9.87 | 19 | 10.94 | 10.47 | | | | 非常に弱(D) | 6 | 重要度6点 | |
| ADL | | RCT/0 | | | | | | | | | | | | | | | | | | | 重要度7点 |

■エビデンスのまとめ

◎定性的システマティックレビュー

| | | |
|-------|-----------------------|--|
| CQ | 1 | 運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？ |
| P | 運動習慣のない18～64歳のがんサバイバー | |
| I | 運動推奨あり | |
| C | 運動推奨なし | |
| 臨床的文脈 | | 運動習慣のない18～64歳のがんサバイバーに対する運動の推奨 |

| | |
|-------------|---|
| O1 | 生存期間 |
| 非直接性のまとめ | 対象文献は1件のみであった。該当する研究は、電話による生活習慣への介入であったため、評価のまとめは「-1」とした。 |
| バイアスリスクのまとめ | 対象文献は1件のみであったが、評価のまとめをそのまま採用し「-1」とした。 |
| 非一貫性その他のまとめ | 非一貫性について、対象文献が1件のため他の研究とのばらつきや重なりを考慮できないため、評価のまとめは「0」とした。不正確さについて、対象文献が1件のみであり全体としてはサンプルサイズが小さいため、評価のまとめは「-1」とした。 |
| コメント | 対象文献は全体で1件のみであった。 |

| | |
|-------------|---|
| O2 | 持久性体力 |
| 非直接性のまとめ | システマティックレビューで抽出された19件の研究における評価指標は、最大あるいは最高酸素摂取量、推定最高酸素摂取量、6分間歩行距離が含まれた。対象者に高齢者が含まれる研究が多かったことから、対象者に関する評価は「-1」が多かった。しかし、全体としての評価は「0」が多かったため、非直接性のまとめは「0」とした。 |
| バイアスリスクのまとめ | 介入の特性上、研究参加者への盲検化が不可能であるため、実行バイアスはすべての研究で「-1」となった。全体のバイアスリスクとしては「-1」となった。 |
| 非一貫性その他のまとめ | 全体のばらつきと重なりを考慮し、非一貫性のまとめは「-1」とした。不正確さについて、文献数の多さからサンプル数が多いとはいえないため評価のまとめは「-1」とした。 |
| コメント | 対象文献は全体で19件であった。3群や4群を比較した研究は、効果量の大きいものだけを解析対象とした。 |

| | |
|-------------|---|
| O3 | 筋力 |
| 非直接性のまとめ | システマティックレビューで抽出された9件の研究における評価指標は、最大挙上重量の評価による下肢最大筋力、簡易下肢筋力評価法による下肢筋力、握力が含まれた。対象者に高齢者が含まれる研究が多かったことから、対象者に関する評価は「-1」が多かった。しかし、全体としての評価は「0」が多かったため、非直接性のまとめは「0」とした。 |
| バイアスリスクのまとめ | 介入の特性上、研究参加者への盲検化が不可能であるため、実行バイアスはすべての研究で「-1」となった。全体のバイアスリスクとしては「-1」となった。 |

| | |
|-------------|---|
| 非一貫性その他のまとめ | 全体のばらつきと重なりを考慮し、非一貫性のまとめは「-1」とした。不正確さについて、文献数の多さからサンプル数が多いとはいえないため評価のまとめは「-1」とした。 |
| コメント | 対象文献は全体で9件であった。3群や4群を比較した研究は、効果量の大きいものだけを解析対象とした。 |

| | |
|-------------|--|
| 04 | QOL |
| 非直接性のまとめ | システマティックレビューで抽出された19件の研究における評価指標は、FACT-G (B, Cなども含む), QLQ-C30, SF-36 (PCS), SF-36 (MCS) が含まれた。対象者に高齢者が含まれる研究が多かったことから、対象者に関する評価は「-1」が多かった。しかし、全体としての評価は「0」が多かったため、非直接性のまとめは「0」とした。 |
| バイアスリスクのまとめ | 介入の特性上、研究参加者への盲検化が不可能であるため、実行バイアスはすべての研究で「-1」となった。全体のバイアスリスクとしては「-1」となった。 |
| 非一貫性その他のまとめ | 全体のばらつきと重なりを考慮し、非一貫性のまとめは「-1」とした。不正確さについて、文献数の多さからサンプル数が多いとはいえないため評価のまとめは「-1」とした。 |
| コメント | 対象文献は全体で19件であった。3群や4群を比較した研究は、効果量の大きいものだけを解析対象とした。 |

| | |
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| 05 | 倦怠感 |
| 非直接性のまとめ | システマティックレビューで抽出された18件の研究における評価指標は、POMS, Piper fatigue scale, FACIT-FS, FACT-F, VAS, FSS, SCFS, Fatigue scaleが含まれた。対象者に高齢者が含まれる研究が多かったことから、対象者に関する評価は「-1」が多かった。しかし、全体としての評価は「0」が多かったため、非直接性のまとめは「0」とした。 |
| バイアスリスクのまとめ | 介入の特性上、研究参加者への盲検化が不可能であるため、実行バイアスはすべての研究で「-1」となった。全体のバイアスリスクとしては「-1」となった。 |
| 非一貫性その他のまとめ | 全体のばらつきと重なりを考慮し、非一貫性のまとめは「-1」とした。不正確さについて、サンプル数が多いとはいえず、尺度の統一性も低いいため評価のまとめは「-1」とした。 |
| コメント | 尺度が多いため、統合したもので評価した。 |

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| 06 | うつ |
| 非直接性のまとめ | システマティックレビューで抽出された5件の研究における評価指標は、BDI-II, CES-D, HADSが含まれた。対象者に高齢者が含まれる研究が多かったことから、対象者に関する評価は「-1」が多かった。しかし、全体としての評価は「0」が多かったため、非直接性のまとめは「0」とした。 |
| バイアスリスクのまとめ | 介入の特性上、研究参加者への盲検化が不可能であるため、実行バイアスはすべての研究で「-1」となった。全体のバイアスリスクとしては「-1」となった。 |
| 非一貫性その他のまとめ | 全体のばらつきと重なりを考慮し、非一貫性のまとめは「-1」とした。不正確さについて、サンプル数が多いとはいえず、尺度の統一性も低いいため評価のまとめは「-1」とした。 |

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| コメント | 尺度が多いため、統合したもので評価した。 |
| 07 | 有害事象 |
| 非直接性のまとめ | システマティックレビューで抽出された62件の研究において、対象者の何人に有害事象が起きたか報告されているものとエピソードが記録されているものに分けて検討した。主の結果としては、エピソードが記録されているものは除外した。対象者に高齢者が含まれる研究が多かったことから、対象者に関する評価は「-1」が多かった。しかし、全体としての評価は「0」が多かったため、非直接性のまとめは「0」とした。 |
| バイアスリスクのまとめ | 介入の特性上、研究参加者への盲検化が不可能であるため、実行バイアスはすべての研究で「-1」となった。全体のバイアスリスクとしては「-1」となった。 |
| 非一貫性その他のまとめ | 一貫性が高いため、非一貫性のまとめは「0」とした。不正確さについて、対象者の何人に有害事象が起きたか報告されている研究を主の結果としたため、サンプル数が多いとはいえないため評価のまとめは「-1」とした。 |
| コメント | 有害事象の発生は、運動介入により筋肉痛などの報告も含まれるため、非介入と比較すると高くなっていた。介入群についての記述しかなく、コントロール群の有害事象は考慮していないかもしれない研究も含まれる可能性がある。 |

◎定性的システマティックレビュー

| | | |
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| CQ | 2 | 運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？ |
| P | 運動習慣のない65歳以上のがんサバイバー | |
| I | 運動推奨あり | |
| C | 運動推奨なし | |
| 臨床的文脈 | | 運動習慣のない65歳以上のがんサバイバーに対する運動の推奨 |

| | |
|-------------|---|
| O1 | 生存期間 |
| 非直接性のまとめ | 対象文献は1件のみであった。該当する研究は、電話による生活習慣への介入であったため、評価のまとめは「-1」とした。 |
| バイアスリスクのまとめ | 対象文献は1件のみであったが、評価のまとめをそのまま採用し「-1」とした。 |
| 非一貫性その他のまとめ | 非一貫性について、対象文献が1件のため他の研究とのばらつきや重なりを考慮できないため、評価のまとめは「0」とした。不正確さについて、対象文献が1件のみであり全体としてはサンプルサイズが小さいため、評価のまとめは「-1」とした。 |
| コメント | 対象文献は全体で1件のみであった。 |

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| O2 | QOL |
| 非直接性のまとめ | システマティックレビューで抽出された18件の研究における評価指標は、FACT-G (B, Cなども含む), QLQ-C30, SF-36 (PCS), SF-36 (MCS) が含まれた。対象者に高齢者が含まれる研究が多かったことから、対象者に関する評価は「-1」が多かった。しかし、全体としての評価は「0」が多かったため、非直接性のまとめは「0」とした。 |
| バイアスリスクのまとめ | 介入の特性上、研究参加者への盲検化が不可能であるため、実行バイアスはすべての研究で「-1」となった。全体のバイアスリスクとしては「-1」となった。 |
| 非一貫性その他のまとめ | 全体のばらつきと重なりを考慮し、非一貫性のまとめは「-1」とした。不正確さについて、文献数の多さからサンプル数が多いとはいえないため評価のまとめは「-1」とした。 |
| コメント | 対象文献は全体で18件であった。3群や4群を比較した研究は、効果量の大きいものだけを解析対象とした。 |

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| O3 | 倦怠感 |
| 非直接性のまとめ | システマティックレビューで抽出された13件の研究における評価指標は、POMS, Piper fatigue scale, FACIT-FS, FACT-F, VAS, FSS, SCFS, Fatigue scaleが含まれた。対象者に高齢者が含まれる研究が多かったことから、対象者に関する評価は「-1」が多かった。しかし、全体としての評価は「0」が多かったため、非直接性のまとめは「0」とした。 |
| バイアスリスクのまとめ | 介入の特性上、研究参加者への盲検化が不可能であるため、実行バイアスはすべての研究で「-1」となった。全体のバイアスリスクとしては「-1」となった。 |

| | |
|-------------|---|
| 非一貫性その他のまとめ | 全体のばらつきと重なりを考慮し、非一貫性のまとめは「-1」とした。不正確さについて、サンプル数が多いとはいえ、尺度の統一性も低いため評価のまとめは「-1」とした。 |
| コメント | 尺度が多いため、統合したもので評価した。 |

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| 04 | うつ |
| 非直接性のまとめ | システマティックレビューで抽出された4件の研究における評価指標は、BDI-II, CES-D, HADSが含まれた。対象者に高齢者が含まれる研究が多かったことから、対象者に関する評価は「-1」が多かった。しかし、全体としての評価は「0」が多かったため、非直接性のまとめは「0」とした。 |
| バイアスリスクのまとめ | 介入の特性上、研究参加者への盲検化が不可能であるため、実行バイアスはすべての研究で「-1」となった。全体のバイアスリスクとしては「-1」となった。 |
| 非一貫性その他のまとめ | 全体のばらつきと重なりを考慮し、非一貫性のまとめは「-1」とした。不正確さについて、サンプル数が多いとはいえ、尺度の統一性も低いため評価のまとめは「-1」とした。 |
| コメント | 尺度が多いため、統合したもので評価した。 |

| | |
|-------------|---|
| 05 | 認知機能 |
| 非直接性のまとめ | 対象文献は1件のみであったため、評価のまとめは「-1」とした。 |
| バイアスリスクのまとめ | 対象文献は1件のみであったが、評価のまとめをそのまま採用し「-1」とした。 |
| 非一貫性その他のまとめ | 非一貫性について、対象文献が1件のため他の研究とのばらつきや重なりを考慮できないため、評価のまとめは「0」とした。不正確さについて、対象文献が1件のみであり全体としてはサンプルサイズが小さいため、評価のまとめは「-1」とした。 |
| コメント | 対象文献は全体で1件のみであった。 |

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| 06 | ADL |
| 非直接性のまとめ | 対象文献は1件のみであったため、評価のまとめは「-1」とした。 |
| バイアスリスクのまとめ | 対象文献は1件のみであったが、評価のまとめをそのまま採用し「-1」とした。 |
| 非一貫性その他のまとめ | 非一貫性について、対象文献が1件のため他の研究とのばらつきや重なりを考慮できないため、評価のまとめは「0」とした。不正確さについて、対象文献が1件のみであり全体としてはサンプルサイズが小さいため、評価のまとめは「-1」とした。 |
| コメント | 対象文献は全体で1件のみであった。 |

| | |
|-------------|---|
| 07 | 有害事象 |
| 非直接性のまとめ | システマティックレビューで抽出された47件の研究において、対象者の何人に有害事象が起きたか報告されているものとエピソードが記録されているものに分けて検討した。主の結果としては、エピソードが記録されているものは除外した。対象者に高齢者が含まれる研究が多かったことから、対象者に関する評価は「-1」が多かった。しかし、全体としての評価は「0」が多かったため、非直接性のまとめは「0」とした。 |
| バイアスリスクのまとめ | 介入の特性上、研究参加者への盲検化が不可能であるため、実行バイアスはすべての研究で「-1」となった。全体のバイアスリスクとしては「-1」となった。 |
| 非一貫性その他のまとめ | 一貫性が高いため、非一貫性のまとめは「0」とした。不正確さについて、対象者の何人に有害事象が起きたか報告されている研究を主の結果としたため、サンプル数が多いとはいえないため評価のまとめは「-1」とした。 |
| コメント | 有害事象の発生は、運動介入により筋肉痛などの報告も含まれるため、非介入と比較すると高くなっていた。介入群についての記述しかなく、コントロール群の有害事象は考慮していないかもしれない研究も含まれる可能性がある。 |

◎メタアナリシス

| CQ | | 運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|--|---------------------------|-------|--|---------------|--------|--|--|-------|--------|--|--|------|----|------|----|------------------------|-----|-------|----|-------|-------|----|------|---------------------|----------------------|-------|------|---|------|------|---|------|-------------------|-----------------------|----|----|----|----|----|----|------|--------------------|--------------------------|-----|-----|----|-----|-----|----|------|--------------------|----------------------|------|----|----|------|------|----|------|-------------------|-------------------------|-----|-----|----|------|-----|---|------|-------------------|------------------------------------|-----|-----|----|------|-----|----|------|----------------------|-------------------------|-----|-----|----|------|-----|----|------|-------------------|-------------------------|----|------|----|-----|------|----|------|-------------------|---------------------------|------|-----|----|------|-------|----|------|---------------------|---------------------------|------|------|----|----|-----|----|------|-------------------|------------------------|------|------|----|------|------|----|------|-------------------|-----------------------------|-----|-----|----|-----|-----|----|------|-------------------|-----------------------------|-----|-----|----|-----|-----|----|------|--------------------|------------------------|-----|-----|----|-----|-----|----|------|-------------------|--------------------|------|------|----|------|------|----|------|--------------------|-----------------------|-----|-----|----|-----|-----|----|------|--------------------|---------------------|-----|-----|----|-----|-----|----|------|-------------------|-----------------------|--|--|------------|--|------------|---------------|--|--------------------------|
| P | 運動習慣のない18～64歳のがんサバイバー | I | 運動推奨あり | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 運動推奨なし | O | 持久性体力 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 研究デザイン | RCT | 文献数 | 18 | コード | Alibhai SM et al.,2014 Bourke L et al.,2011 Brocki BC et al.,2014 Broderick JM et al.,2013 Brown JC et al.,2018 Campbell KL et al.,2018 Cantarero-Villanueva I et al.,2016 Courneya KS et al.,2003 Crawford JJ et al.,2017 Culos-Reed SN et al.,2010 Dolan LB et al.,2016_HIAT LaStayo PC et al.,2011 McNeil J et al.,2019_highPA Musanti R et al.,2012_AE+RE O'Neill LM et al.,2018 Pisu M et al.,2017 Rogers LQ et al.,2014 Scott E et al.,2013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| モデル | ランダム効果モデル | 方法 | 分散逆数法 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 効果指標 | SMD | 統合値 | 0.65 (0.34-0.95) P<0.0001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forest plot | <table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="2">PA</th> <th colspan="2">No PA</th> <th rowspan="2">Total</th> <th rowspan="2">Weight</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> </tr> <tr> <th>Mean</th> <th>SD</th> <th>Mean</th> <th>SD</th> </tr> </thead> <tbody> <tr><td>Alibhai SM et al.,2014</td><td>106</td><td>228.4</td><td>22</td><td>140.6</td><td>168.1</td><td>18</td><td>5.9%</td><td>-0.16 [-0.70, 0.49]</td></tr> <tr><td>Bourke L et al.,2011</td><td>119.9</td><td>53.2</td><td>8</td><td>48.4</td><td>42.8</td><td>9</td><td>3.9%</td><td>1.42 [0.32, 2.51]</td></tr> <tr><td>Brocki BC et al.,2014</td><td>61</td><td>52</td><td>41</td><td>55</td><td>45</td><td>37</td><td>6.7%</td><td>0.12 [-0.32, 0.57]</td></tr> <tr><td>Broderick JM et al.,2013</td><td>3.8</td><td>5.6</td><td>23</td><td>1.1</td><td>4.9</td><td>20</td><td>6.0%</td><td>0.50 [-0.11, 1.11]</td></tr> <tr><td>Brown JC et al.,2018</td><td>18.8</td><td>27</td><td>23</td><td>-3.7</td><td>44.6</td><td>25</td><td>6.1%</td><td>0.59 [0.01, 1.17]</td></tr> <tr><td>Campbell KL et al.,2018</td><td>3.4</td><td>2.5</td><td>10</td><td>-0.3</td><td>1.8</td><td>9</td><td>4.0%</td><td>1.61 [0.54, 2.68]</td></tr> <tr><td>Cantarero-Villanueva I et al.,2016</td><td>4.9</td><td>106</td><td>19</td><td>79.7</td><td>107</td><td>21</td><td>5.8%</td><td>-0.69 [-1.33, -0.05]</td></tr> <tr><td>Courneya KS et al.,2003</td><td>0.2</td><td>0.2</td><td>24</td><td>-0.1</td><td>0.1</td><td>26</td><td>5.7%</td><td>1.89 [1.22, 2.57]</td></tr> <tr><td>Crawford JJ et al.,2017</td><td>28</td><td>40.3</td><td>24</td><td>-18</td><td>25.3</td><td>11</td><td>5.2%</td><td>1.18 [0.41, 1.95]</td></tr> <tr><td>Culos-Reed SN et al.,2010</td><td>24.8</td><td>170</td><td>36</td><td>28.8</td><td>127.5</td><td>20</td><td>6.3%</td><td>-0.03 [-0.57, 0.52]</td></tr> <tr><td>Dolan LB et al.,2016_HIAT</td><td>11.5</td><td>10.5</td><td>12</td><td>-8</td><td>7.2</td><td>10</td><td>4.2%</td><td>1.84 [0.81, 2.87]</td></tr> <tr><td>LaStayo PC et al.,2011</td><td>49.7</td><td>50.6</td><td>20</td><td>10.4</td><td>56.2</td><td>20</td><td>5.8%</td><td>0.72 [0.08, 1.36]</td></tr> <tr><td>McNeil J et al.,2019_highPA</td><td>5.6</td><td>4.7</td><td>15</td><td>0.3</td><td>4.5</td><td>13</td><td>5.1%</td><td>1.12 [0.31, 1.92]</td></tr> <tr><td>Musanti R et al.,2012_AE+RE</td><td>1.2</td><td>2.8</td><td>11</td><td>0.9</td><td>3.4</td><td>12</td><td>5.0%</td><td>0.09 [-0.73, 0.91]</td></tr> <tr><td>O'Neill LM et al.,2018</td><td>3.5</td><td>2.6</td><td>21</td><td>0.9</td><td>2.5</td><td>22</td><td>5.8%</td><td>1.00 [0.36, 1.64]</td></tr> <tr><td>Pisu M et al.,2017</td><td>36.2</td><td>52.1</td><td>15</td><td>24.5</td><td>46.5</td><td>16</td><td>5.5%</td><td>0.23 [-0.48, 0.94]</td></tr> <tr><td>Rogers LQ et al.,2014</td><td>2.8</td><td>4.9</td><td>22</td><td>1.1</td><td>4.2</td><td>24</td><td>6.1%</td><td>0.37 [-0.22, 0.95]</td></tr> <tr><td>Scott E et al.,2013</td><td>7.6</td><td>4.8</td><td>47</td><td>3.5</td><td>4.1</td><td>43</td><td>6.8%</td><td>0.91 [0.47, 1.34]</td></tr> <tr> <td>Total (95% CI)</td> <td></td> <td></td> <td>393</td> <td></td> <td>356</td> <td>100.0%</td> <td></td> <td>0.65 [0.34, 0.95]</td> </tr> </tbody> </table> <p>Heterogeneity: Tau² = 0.31; Chi² = 66.05, df = 17 (P < 0.00001); I² = 74% Test for overall effect: Z = 4.13 (P < 0.0001)</p> | | | | Study or Subgroup | PA | | No PA | | Total | Weight | Std. Mean Difference IV, Random, 95% CI | Std. Mean Difference IV, Random, 95% CI | Mean | SD | Mean | SD | Alibhai SM et al.,2014 | 106 | 228.4 | 22 | 140.6 | 168.1 | 18 | 5.9% | -0.16 [-0.70, 0.49] | Bourke L et al.,2011 | 119.9 | 53.2 | 8 | 48.4 | 42.8 | 9 | 3.9% | 1.42 [0.32, 2.51] | Brocki BC et al.,2014 | 61 | 52 | 41 | 55 | 45 | 37 | 6.7% | 0.12 [-0.32, 0.57] | Broderick JM et al.,2013 | 3.8 | 5.6 | 23 | 1.1 | 4.9 | 20 | 6.0% | 0.50 [-0.11, 1.11] | Brown JC et al.,2018 | 18.8 | 27 | 23 | -3.7 | 44.6 | 25 | 6.1% | 0.59 [0.01, 1.17] | Campbell KL et al.,2018 | 3.4 | 2.5 | 10 | -0.3 | 1.8 | 9 | 4.0% | 1.61 [0.54, 2.68] | Cantarero-Villanueva I et al.,2016 | 4.9 | 106 | 19 | 79.7 | 107 | 21 | 5.8% | -0.69 [-1.33, -0.05] | Courneya KS et al.,2003 | 0.2 | 0.2 | 24 | -0.1 | 0.1 | 26 | 5.7% | 1.89 [1.22, 2.57] | Crawford JJ et al.,2017 | 28 | 40.3 | 24 | -18 | 25.3 | 11 | 5.2% | 1.18 [0.41, 1.95] | Culos-Reed SN et al.,2010 | 24.8 | 170 | 36 | 28.8 | 127.5 | 20 | 6.3% | -0.03 [-0.57, 0.52] | Dolan LB et al.,2016_HIAT | 11.5 | 10.5 | 12 | -8 | 7.2 | 10 | 4.2% | 1.84 [0.81, 2.87] | LaStayo PC et al.,2011 | 49.7 | 50.6 | 20 | 10.4 | 56.2 | 20 | 5.8% | 0.72 [0.08, 1.36] | McNeil J et al.,2019_highPA | 5.6 | 4.7 | 15 | 0.3 | 4.5 | 13 | 5.1% | 1.12 [0.31, 1.92] | Musanti R et al.,2012_AE+RE | 1.2 | 2.8 | 11 | 0.9 | 3.4 | 12 | 5.0% | 0.09 [-0.73, 0.91] | O'Neill LM et al.,2018 | 3.5 | 2.6 | 21 | 0.9 | 2.5 | 22 | 5.8% | 1.00 [0.36, 1.64] | Pisu M et al.,2017 | 36.2 | 52.1 | 15 | 24.5 | 46.5 | 16 | 5.5% | 0.23 [-0.48, 0.94] | Rogers LQ et al.,2014 | 2.8 | 4.9 | 22 | 1.1 | 4.2 | 24 | 6.1% | 0.37 [-0.22, 0.95] | Scott E et al.,2013 | 7.6 | 4.8 | 47 | 3.5 | 4.1 | 43 | 6.8% | 0.91 [0.47, 1.34] | Total (95% CI) | | | 393 | | 356 | 100.0% | | 0.65 [0.34, 0.95] |
| Study or Subgroup | PA | | No PA | | | Total | Weight | Std. Mean Difference IV, Random, 95% CI | Std. Mean Difference IV, Random, 95% CI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mean | SD | Mean | SD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alibhai SM et al.,2014 | 106 | 228.4 | 22 | 140.6 | 168.1 | 18 | 5.9% | -0.16 [-0.70, 0.49] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bourke L et al.,2011 | 119.9 | 53.2 | 8 | 48.4 | 42.8 | 9 | 3.9% | 1.42 [0.32, 2.51] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brocki BC et al.,2014 | 61 | 52 | 41 | 55 | 45 | 37 | 6.7% | 0.12 [-0.32, 0.57] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Broderick JM et al.,2013 | 3.8 | 5.6 | 23 | 1.1 | 4.9 | 20 | 6.0% | 0.50 [-0.11, 1.11] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brown JC et al.,2018 | 18.8 | 27 | 23 | -3.7 | 44.6 | 25 | 6.1% | 0.59 [0.01, 1.17] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Campbell KL et al.,2018 | 3.4 | 2.5 | 10 | -0.3 | 1.8 | 9 | 4.0% | 1.61 [0.54, 2.68] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cantarero-Villanueva I et al.,2016 | 4.9 | 106 | 19 | 79.7 | 107 | 21 | 5.8% | -0.69 [-1.33, -0.05] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Courneya KS et al.,2003 | 0.2 | 0.2 | 24 | -0.1 | 0.1 | 26 | 5.7% | 1.89 [1.22, 2.57] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Crawford JJ et al.,2017 | 28 | 40.3 | 24 | -18 | 25.3 | 11 | 5.2% | 1.18 [0.41, 1.95] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Culos-Reed SN et al.,2010 | 24.8 | 170 | 36 | 28.8 | 127.5 | 20 | 6.3% | -0.03 [-0.57, 0.52] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dolan LB et al.,2016_HIAT | 11.5 | 10.5 | 12 | -8 | 7.2 | 10 | 4.2% | 1.84 [0.81, 2.87] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LaStayo PC et al.,2011 | 49.7 | 50.6 | 20 | 10.4 | 56.2 | 20 | 5.8% | 0.72 [0.08, 1.36] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| McNeil J et al.,2019_highPA | 5.6 | 4.7 | 15 | 0.3 | 4.5 | 13 | 5.1% | 1.12 [0.31, 1.92] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Musanti R et al.,2012_AE+RE | 1.2 | 2.8 | 11 | 0.9 | 3.4 | 12 | 5.0% | 0.09 [-0.73, 0.91] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| O'Neill LM et al.,2018 | 3.5 | 2.6 | 21 | 0.9 | 2.5 | 22 | 5.8% | 1.00 [0.36, 1.64] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pisu M et al.,2017 | 36.2 | 52.1 | 15 | 24.5 | 46.5 | 16 | 5.5% | 0.23 [-0.48, 0.94] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2014 | 2.8 | 4.9 | 22 | 1.1 | 4.2 | 24 | 6.1% | 0.37 [-0.22, 0.95] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scott E et al.,2013 | 7.6 | 4.8 | 47 | 3.5 | 4.1 | 43 | 6.8% | 0.91 [0.47, 1.34] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total (95% CI) | | | 393 | | 356 | 100.0% | | 0.65 [0.34, 0.95] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| コメント : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funnel plot | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| コメント : | ファンネルプロットからは出版バイアスは見られない。 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| その他の解析 | | | | | コメント : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| メタリグレッション | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 感度分析 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| CQ | | 運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| P | 運動習慣のない18～64歳のがんサバイバー | I | 運動推奨あり | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 運動推奨なし | O | 筋力 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 研究デザイン | RCT | 文献数 | 9 | コード | Ahmed RL et al.,2006 Alibhai SM et al.,2014 Bourke L et al.,2011 Cantarero-Villanueva I et al.,2013 Crawford JJ et al.,2017 Dolan LB et al.,2016_HIAT Kim SH et al.,2018 LaStayo PC et al.,2011 Rogers LQ et al.,2014 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| モデル | ランダム効果モデル | 方法 | 分散逆数法 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 効果指標 | SMD | 統合値 | 0.79 (0.22-1.36) P=0.006 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forest plot | <table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="3">PA</th> <th colspan="3">No PA</th> <th rowspan="2">Weight</th> <th colspan="2">Std. Mean Difference</th> </tr> <tr> <th>Mean</th> <th>SD</th> <th>Total</th> <th>Mean</th> <th>SD</th> <th>Total</th> <th>IV, Random, 95% CI</th> <th>IV, Random, 95% CI</th> </tr> </thead> <tbody> <tr> <td>Ahmed RL et al.,2006</td> <td>81.8</td> <td>48.9</td> <td>23</td> <td>20.3</td> <td>47</td> <td>23</td> <td>11.6%</td> <td>1.26</td> <td>[0.62, 1.90]</td> </tr> <tr> <td>Alibhai SM et al.,2014</td> <td>-0.2</td> <td>2.8</td> <td>22</td> <td>-0.1</td> <td>2.9</td> <td>18</td> <td>11.6%</td> <td>-0.03</td> <td>[-0.66, 0.59]</td> </tr> <tr> <td>Bourke L et al.,2011</td> <td>1.3</td> <td>7.7</td> <td>8</td> <td>15.9</td> <td>22.8</td> <td>9</td> <td>9.5%</td> <td>-0.79</td> <td>[-1.79, 0.21]</td> </tr> <tr> <td>Cantarero-Villanueva I et al.,2013</td> <td>13.2</td> <td>5.8</td> <td>32</td> <td>5.4</td> <td>6.1</td> <td>29</td> <td>12.0%</td> <td>1.30</td> <td>[0.74, 1.85]</td> </tr> <tr> <td>Crawford JJ et al.,2017</td> <td>3.1</td> <td>3.6</td> <td>24</td> <td>-0.5</td> <td>2.8</td> <td>11</td> <td>10.9%</td> <td>1.04</td> <td>[0.28, 1.80]</td> </tr> <tr> <td>Dolan LB et al.,2016_HIAT</td> <td>13.3</td> <td>7.9</td> <td>12</td> <td>0.3</td> <td>11.1</td> <td>10</td> <td>9.9%</td> <td>1.32</td> <td>[0.38, 2.26]</td> </tr> <tr> <td>Kim SH et al.,2018</td> <td>-0.2</td> <td>0.6</td> <td>26</td> <td>-1.6</td> <td>0.6</td> <td>25</td> <td>11.1%</td> <td>2.30</td> <td>[1.58, 3.02]</td> </tr> <tr> <td>LaStayo PC et al.,2011</td> <td>57.3</td> <td>70.3</td> <td>20</td> <td>19.1</td> <td>39.5</td> <td>20</td> <td>11.6%</td> <td>0.66</td> <td>[0.02, 1.29]</td> </tr> <tr> <td>Rogers LQ et al.,2014</td> <td>4.1</td> <td>14.4</td> <td>22</td> <td>5.2</td> <td>19.7</td> <td>24</td> <td>11.9%</td> <td>-0.06</td> <td>[-0.64, 0.52]</td> </tr> <tr> <td>Total (95% CI)</td> <td colspan="3">189</td> <td colspan="3">169</td> <td>100.0%</td> <td>0.79</td> <td>[0.22, 1.36]</td> </tr> </tbody> </table> <p>Heterogeneity: Tau² = 0.62; Chi² = 48.65, df = 8 (P < 0.00001); I² = 84% Test for overall effect: Z = 2.72 (P = 0.006)</p> | | | | | Study or Subgroup | PA | | | No PA | | | Weight | Std. Mean Difference | | Mean | SD | Total | Mean | SD | Total | IV, Random, 95% CI | IV, Random, 95% CI | Ahmed RL et al.,2006 | 81.8 | 48.9 | 23 | 20.3 | 47 | 23 | 11.6% | 1.26 | [0.62, 1.90] | Alibhai SM et al.,2014 | -0.2 | 2.8 | 22 | -0.1 | 2.9 | 18 | 11.6% | -0.03 | [-0.66, 0.59] | Bourke L et al.,2011 | 1.3 | 7.7 | 8 | 15.9 | 22.8 | 9 | 9.5% | -0.79 | [-1.79, 0.21] | Cantarero-Villanueva I et al.,2013 | 13.2 | 5.8 | 32 | 5.4 | 6.1 | 29 | 12.0% | 1.30 | [0.74, 1.85] | Crawford JJ et al.,2017 | 3.1 | 3.6 | 24 | -0.5 | 2.8 | 11 | 10.9% | 1.04 | [0.28, 1.80] | Dolan LB et al.,2016_HIAT | 13.3 | 7.9 | 12 | 0.3 | 11.1 | 10 | 9.9% | 1.32 | [0.38, 2.26] | Kim SH et al.,2018 | -0.2 | 0.6 | 26 | -1.6 | 0.6 | 25 | 11.1% | 2.30 | [1.58, 3.02] | LaStayo PC et al.,2011 | 57.3 | 70.3 | 20 | 19.1 | 39.5 | 20 | 11.6% | 0.66 | [0.02, 1.29] | Rogers LQ et al.,2014 | 4.1 | 14.4 | 22 | 5.2 | 19.7 | 24 | 11.9% | -0.06 | [-0.64, 0.52] | Total (95% CI) | 189 | | | 169 | | | 100.0% | 0.79 | [0.22, 1.36] |
| Study or Subgroup | PA | | | No PA | | | Weight | Std. Mean Difference | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mean | SD | Total | Mean | SD | Total | | IV, Random, 95% CI | IV, Random, 95% CI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ahmed RL et al.,2006 | 81.8 | 48.9 | 23 | 20.3 | 47 | 23 | 11.6% | 1.26 | [0.62, 1.90] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alibhai SM et al.,2014 | -0.2 | 2.8 | 22 | -0.1 | 2.9 | 18 | 11.6% | -0.03 | [-0.66, 0.59] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bourke L et al.,2011 | 1.3 | 7.7 | 8 | 15.9 | 22.8 | 9 | 9.5% | -0.79 | [-1.79, 0.21] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cantarero-Villanueva I et al.,2013 | 13.2 | 5.8 | 32 | 5.4 | 6.1 | 29 | 12.0% | 1.30 | [0.74, 1.85] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Crawford JJ et al.,2017 | 3.1 | 3.6 | 24 | -0.5 | 2.8 | 11 | 10.9% | 1.04 | [0.28, 1.80] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dolan LB et al.,2016_HIAT | 13.3 | 7.9 | 12 | 0.3 | 11.1 | 10 | 9.9% | 1.32 | [0.38, 2.26] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kim SH et al.,2018 | -0.2 | 0.6 | 26 | -1.6 | 0.6 | 25 | 11.1% | 2.30 | [1.58, 3.02] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LaStayo PC et al.,2011 | 57.3 | 70.3 | 20 | 19.1 | 39.5 | 20 | 11.6% | 0.66 | [0.02, 1.29] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2014 | 4.1 | 14.4 | 22 | 5.2 | 19.7 | 24 | 11.9% | -0.06 | [-0.64, 0.52] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total (95% CI) | 189 | | | 169 | | | 100.0% | 0.79 | [0.22, 1.36] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funnel plot | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | コメント：ファンネルプロットからは出版バイアスは見られない。 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| その他の解析 | | | | | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| メタリグレーション | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 感度分析 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| CQ | | 運動習慣のない18~64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| P | 運動習慣のない18~64歳のがんサバイバー | | I | 運動推奨あり | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 運動推奨なし | | O | QOL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 研究デザイン | RCT | 文献数 | 19 | コード | Alibhai SM et al.,2014 Bourke L et al.,2011 Broderick JM et al.,2013 Courneya KS et al.,2003 Culos-Reed SN et al.,2010 Galiano-Castillo N et al.,2016 Goodwin PJ et al.,2014 Kim JY et al.,2019 Campo RA et al.,2011 McNeil J et al.,2019_highPA Milne HM et al.,2008 Murtezani A et al.,2014 Nyrop KA et al.,2017 Pinto BM et al.,2013 Pisu M et al.,2017 Scott E et al.,2013 Vallance JK et al.,2007_combo Zhou Y et al.,2017 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| モデル | ランダム効果モデル | | 方法 | 分散逆数法 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 効果指標 | SMD | | 統合値 | 0.70 (0.25-1.14) P=0.00001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forest plot | <table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="2">PA</th> <th colspan="2">No PA</th> <th rowspan="2">Total</th> <th rowspan="2">Weight</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> </tr> <tr> <th>Mean</th> <th>SD</th> <th>Mean</th> <th>SD</th> </tr> </thead> <tbody> <tr><td>Alibhai SM et al.,2014</td><td>0.5</td><td>12.7</td><td>22</td><td>11.7</td><td>20.1</td><td>18</td><td>5.5%</td><td>-0.67 [-1.31, -0.03]</td></tr> <tr><td>Bourke L et al.,2011</td><td>0</td><td>1.53</td><td>9</td><td>4</td><td>4.08</td><td>9</td><td>4.7%</td><td>-1.24 [-2.27, -0.21]</td></tr> <tr><td>Broderick JM et al.,2013</td><td>4.8</td><td>8.79</td><td>21</td><td>4.2</td><td>9.3</td><td>19</td><td>5.5%</td><td>0.07 [-0.55, 0.69]</td></tr> <tr><td>Campo RA et al.,2011</td><td>1.7</td><td>10.78</td><td>29</td><td>3.2</td><td>7.99</td><td>25</td><td>5.7%</td><td>-0.15 [-0.69, 0.38]</td></tr> <tr><td>Courneya KS et al.,2003</td><td>9.1</td><td>14.1</td><td>24</td><td>0.3</td><td>8.5</td><td>28</td><td>5.6%</td><td>0.76 [0.19, 1.32]</td></tr> <tr><td>Culos-Reed SN et al.,2010</td><td>2.7</td><td>0.92</td><td>53</td><td>-2.33</td><td>0.88</td><td>47</td><td>5.0%</td><td>5.54 [4.66, 6.41]</td></tr> <tr><td>Galiano-Castillo N et al.,2016</td><td>14.31</td><td>25.57</td><td>39</td><td>-4.28</td><td>25.49</td><td>37</td><td>5.8%</td><td>0.72 [0.26, 1.19]</td></tr> <tr><td>Goodwin PJ et al.,2014</td><td>0.58</td><td>1.58</td><td>171</td><td>0.44</td><td>1.63</td><td>167</td><td>6.1%</td><td>0.09 [-0.13, 0.30]</td></tr> <tr><td>Kim JY et al.,2019</td><td>2.9</td><td>9.2</td><td>37</td><td>1.6</td><td>11.3</td><td>34</td><td>5.8%</td><td>0.13 [-0.34, 0.59]</td></tr> <tr><td>McNeil J et al.,2019_highPA</td><td>-1.1</td><td>12.26</td><td>15</td><td>-1.9</td><td>11.75</td><td>13</td><td>5.3%</td><td>0.06 [-0.68, 0.81]</td></tr> <tr><td>Milne HM et al.,2008</td><td>12.6</td><td>12.62</td><td>29</td><td>-3</td><td>8.41</td><td>29</td><td>5.6%</td><td>1.44 [0.85, 2.02]</td></tr> <tr><td>Murtezani A et al.,2014</td><td>9.06</td><td>2.12</td><td>30</td><td>-0.51</td><td>2.06</td><td>32</td><td>4.8%</td><td>4.52 [3.56, 5.48]</td></tr> <tr><td>Nyrop KA et al.,2017</td><td>1.48</td><td>13.06</td><td>31</td><td>0.07</td><td>11.86</td><td>31</td><td>5.8%</td><td>0.11 [-0.39, 0.61]</td></tr> <tr><td>Pinto BM et al.,2013</td><td>6</td><td>11.32</td><td>20</td><td>5.5</td><td>11.39</td><td>26</td><td>5.6%</td><td>0.04 [-0.54, 0.63]</td></tr> <tr><td>Pisu M et al.,2017</td><td>-0.57</td><td>4.68</td><td>13</td><td>-2.11</td><td>5.88</td><td>16</td><td>5.3%</td><td>0.28 [-0.46, 1.01]</td></tr> <tr><td>Scott E et al.,2013</td><td>13.3</td><td>14.8</td><td>47</td><td>5.1</td><td>10.7</td><td>43</td><td>5.9%</td><td>0.63 [0.20, 1.05]</td></tr> <tr><td>Vallance JK et al.,2007_combo</td><td>6.9</td><td>13.11</td><td>93</td><td>1.1</td><td>0.99</td><td>96</td><td>6.0%</td><td>0.63 [0.33, 0.92]</td></tr> <tr><td>Zhou Y et al.,2017</td><td>1.8</td><td>9.06</td><td>74</td><td>-2</td><td>9.65</td><td>70</td><td>6.0%</td><td>0.40 [0.07, 0.73]</td></tr> <tr><td>Total (95% CI)</td><td></td><td></td><td>757</td><td></td><td>740</td><td>100.0%</td><td>0.70 [0.25, 1.14]</td><td></td></tr> </tbody> </table> <p>Heterogeneity: Tau² = 0.93; Chi² = 260.10, df = 17 (P < 0.00001); I² = 93% Test for overall effect Z = 3.08 (P = 0.002)</p> | | | | | Study or Subgroup | PA | | No PA | | Total | Weight | Std. Mean Difference IV, Random, 95% CI | Std. Mean Difference IV, Random, 95% CI | Mean | SD | Mean | SD | Alibhai SM et al.,2014 | 0.5 | 12.7 | 22 | 11.7 | 20.1 | 18 | 5.5% | -0.67 [-1.31, -0.03] | Bourke L et al.,2011 | 0 | 1.53 | 9 | 4 | 4.08 | 9 | 4.7% | -1.24 [-2.27, -0.21] | Broderick JM et al.,2013 | 4.8 | 8.79 | 21 | 4.2 | 9.3 | 19 | 5.5% | 0.07 [-0.55, 0.69] | Campo RA et al.,2011 | 1.7 | 10.78 | 29 | 3.2 | 7.99 | 25 | 5.7% | -0.15 [-0.69, 0.38] | Courneya KS et al.,2003 | 9.1 | 14.1 | 24 | 0.3 | 8.5 | 28 | 5.6% | 0.76 [0.19, 1.32] | Culos-Reed SN et al.,2010 | 2.7 | 0.92 | 53 | -2.33 | 0.88 | 47 | 5.0% | 5.54 [4.66, 6.41] | Galiano-Castillo N et al.,2016 | 14.31 | 25.57 | 39 | -4.28 | 25.49 | 37 | 5.8% | 0.72 [0.26, 1.19] | Goodwin PJ et al.,2014 | 0.58 | 1.58 | 171 | 0.44 | 1.63 | 167 | 6.1% | 0.09 [-0.13, 0.30] | Kim JY et al.,2019 | 2.9 | 9.2 | 37 | 1.6 | 11.3 | 34 | 5.8% | 0.13 [-0.34, 0.59] | McNeil J et al.,2019_highPA | -1.1 | 12.26 | 15 | -1.9 | 11.75 | 13 | 5.3% | 0.06 [-0.68, 0.81] | Milne HM et al.,2008 | 12.6 | 12.62 | 29 | -3 | 8.41 | 29 | 5.6% | 1.44 [0.85, 2.02] | Murtezani A et al.,2014 | 9.06 | 2.12 | 30 | -0.51 | 2.06 | 32 | 4.8% | 4.52 [3.56, 5.48] | Nyrop KA et al.,2017 | 1.48 | 13.06 | 31 | 0.07 | 11.86 | 31 | 5.8% | 0.11 [-0.39, 0.61] | Pinto BM et al.,2013 | 6 | 11.32 | 20 | 5.5 | 11.39 | 26 | 5.6% | 0.04 [-0.54, 0.63] | Pisu M et al.,2017 | -0.57 | 4.68 | 13 | -2.11 | 5.88 | 16 | 5.3% | 0.28 [-0.46, 1.01] | Scott E et al.,2013 | 13.3 | 14.8 | 47 | 5.1 | 10.7 | 43 | 5.9% | 0.63 [0.20, 1.05] | Vallance JK et al.,2007_combo | 6.9 | 13.11 | 93 | 1.1 | 0.99 | 96 | 6.0% | 0.63 [0.33, 0.92] | Zhou Y et al.,2017 | 1.8 | 9.06 | 74 | -2 | 9.65 | 70 | 6.0% | 0.40 [0.07, 0.73] | Total (95% CI) | | | 757 | | 740 | 100.0% | 0.70 [0.25, 1.14] | |
| Study or Subgroup | PA | | No PA | | Total | | Weight | Std. Mean Difference IV, Random, 95% CI | Std. Mean Difference IV, Random, 95% CI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mean | SD | Mean | SD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alibhai SM et al.,2014 | 0.5 | 12.7 | 22 | 11.7 | 20.1 | 18 | 5.5% | -0.67 [-1.31, -0.03] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bourke L et al.,2011 | 0 | 1.53 | 9 | 4 | 4.08 | 9 | 4.7% | -1.24 [-2.27, -0.21] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Broderick JM et al.,2013 | 4.8 | 8.79 | 21 | 4.2 | 9.3 | 19 | 5.5% | 0.07 [-0.55, 0.69] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Campo RA et al.,2011 | 1.7 | 10.78 | 29 | 3.2 | 7.99 | 25 | 5.7% | -0.15 [-0.69, 0.38] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Courneya KS et al.,2003 | 9.1 | 14.1 | 24 | 0.3 | 8.5 | 28 | 5.6% | 0.76 [0.19, 1.32] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Culos-Reed SN et al.,2010 | 2.7 | 0.92 | 53 | -2.33 | 0.88 | 47 | 5.0% | 5.54 [4.66, 6.41] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Galiano-Castillo N et al.,2016 | 14.31 | 25.57 | 39 | -4.28 | 25.49 | 37 | 5.8% | 0.72 [0.26, 1.19] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Goodwin PJ et al.,2014 | 0.58 | 1.58 | 171 | 0.44 | 1.63 | 167 | 6.1% | 0.09 [-0.13, 0.30] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kim JY et al.,2019 | 2.9 | 9.2 | 37 | 1.6 | 11.3 | 34 | 5.8% | 0.13 [-0.34, 0.59] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| McNeil J et al.,2019_highPA | -1.1 | 12.26 | 15 | -1.9 | 11.75 | 13 | 5.3% | 0.06 [-0.68, 0.81] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Milne HM et al.,2008 | 12.6 | 12.62 | 29 | -3 | 8.41 | 29 | 5.6% | 1.44 [0.85, 2.02] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Murtezani A et al.,2014 | 9.06 | 2.12 | 30 | -0.51 | 2.06 | 32 | 4.8% | 4.52 [3.56, 5.48] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nyrop KA et al.,2017 | 1.48 | 13.06 | 31 | 0.07 | 11.86 | 31 | 5.8% | 0.11 [-0.39, 0.61] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pinto BM et al.,2013 | 6 | 11.32 | 20 | 5.5 | 11.39 | 26 | 5.6% | 0.04 [-0.54, 0.63] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pisu M et al.,2017 | -0.57 | 4.68 | 13 | -2.11 | 5.88 | 16 | 5.3% | 0.28 [-0.46, 1.01] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scott E et al.,2013 | 13.3 | 14.8 | 47 | 5.1 | 10.7 | 43 | 5.9% | 0.63 [0.20, 1.05] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vallance JK et al.,2007_combo | 6.9 | 13.11 | 93 | 1.1 | 0.99 | 96 | 6.0% | 0.63 [0.33, 0.92] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zhou Y et al.,2017 | 1.8 | 9.06 | 74 | -2 | 9.65 | 70 | 6.0% | 0.40 [0.07, 0.73] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total (95% CI) | | | 757 | | 740 | 100.0% | 0.70 [0.25, 1.14] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funnel plot | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| コメント：ファンネルプロットからは出版バイアスは見られない。 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| その他の解析 | | | | | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| メタリグレーション | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 感度分析 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| CQ | | 運動習慣のない18~64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|--|------------------------------|------|---|-------------------|---------------|--|--|--|-------|--------|--|--|------|----|------|----|------------------------|------|-----|----|------|-----|----|------|--------------------|----------------------|----|-----|---|----|-----|---|------|----------------------|--------------------------|------|-----|----|------|-----|----|------|----------------------|-------------------------|------|------|----|------|------|---|------|---------------------|------------------------------------|------|-----|----|-----|-----|----|------|----------------------|------------------------------------|----|-----|----|------|-----|----|------|----------------------|------------------------------------|----|-----|----|-----|-----|----|------|----------------------|---------------------------|------|-----|----|---|-----|----|------|---------------------|--------------------|------|-----|----|------|-----|----|------|---------------------|----------------------|------|------|----|------|------|----|------|----------------------|----------------------|-----|-----|----|-----|-----|----|------|--------------------|----------------------|------|------|----|------|------|----|------|---------------------|---------------------|-------|------|---|------|-----|----|------|---------------------|-----------------------|-----|-----|----|------|-----|----|------|--------------------|------------------------|------|-----|----|------|-----|----|------|---------------------|-------------------------------|------|-----|----|------|-----|----|------|---------------------|--------------------|----|-----|----|------|-----|----|------|---------------------|-----------------------|--|--|------------|--|--|------------|---------------|-----------------------------|
| P | 運動習慣のない18~64歳のがんサバイバー | I | 運動推奨あり | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 運動推奨なし | O | 疲労 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 研究デザイン | RCT | 文献数 | 18 | コード | Alibhai SM et al.,2014 Cantarero-Villanueva I et al.,2012 Bourke L et al.,2011 Broderick JM et al.,2013 Campbell KL et al.,2018 Cantarero-Villanueva I et al.,2011 Cantarero-Villanueva I et al.,2013 Culos-Reed SN et al.,2010 Kim JY et al.,2019 Milne HM et al.,2008 Nyrop KA et al.,2017 Pinto BM et al.,2013 Rabin C et al.,2011 Rogers LQ et al.,2014 Rogers LQ et al.,2015a Vallance JK et al.,2007_combo Zhou Y et al.,2017 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| モデル | ランダム効果モデル | 方法 | 分散逆数法 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 効果指標 | SMD | 統合値 | -0.50 (-0.74--0.26) P<0.0001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forest plot | <table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="2">PA</th> <th colspan="2">No PA</th> <th rowspan="2">Total</th> <th rowspan="2">Weight</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> </tr> <tr> <th>Mean</th> <th>SD</th> <th>Mean</th> <th>SD</th> </tr> </thead> <tbody> <tr><td>Alibhai SM et al.,2014</td><td>-2.3</td><td>7.8</td><td>22</td><td>-3.1</td><td>9.3</td><td>18</td><td>5.6%</td><td>0.09 [-0.53, 0.72]</td></tr> <tr><td>Bourke L et al.,2011</td><td>-5</td><td>1.5</td><td>9</td><td>-1</td><td>1.5</td><td>9</td><td>2.4%</td><td>-2.54 [-3.86, -1.22]</td></tr> <tr><td>Broderick JM et al.,2013</td><td>-6.2</td><td>4.1</td><td>21</td><td>-2.3</td><td>2.8</td><td>19</td><td>5.3%</td><td>-1.08 [-1.75, -0.41]</td></tr> <tr><td>Campbell KL et al.,2018</td><td>-4.7</td><td>10.1</td><td>10</td><td>-0.5</td><td>11.4</td><td>9</td><td>4.0%</td><td>-0.37 [-1.28, 0.54]</td></tr> <tr><td>Cantarero-Villanueva I et al.,2011</td><td>-2.3</td><td>2.3</td><td>38</td><td>0.2</td><td>1.8</td><td>40</td><td>6.8%</td><td>-1.20 [-1.69, -0.72]</td></tr> <tr><td>Cantarero-Villanueva I et al.,2012</td><td>-8</td><td>9.6</td><td>38</td><td>-1.9</td><td>6.7</td><td>40</td><td>6.8%</td><td>-0.73 [-1.19, -0.27]</td></tr> <tr><td>Cantarero-Villanueva I et al.,2013</td><td>-2</td><td>1.7</td><td>32</td><td>0.3</td><td>1.4</td><td>29</td><td>6.0%</td><td>-1.45 [-2.02, -0.88]</td></tr> <tr><td>Culos-Reed SN et al.,2010</td><td>-0.3</td><td>1.6</td><td>37</td><td>0</td><td>1.1</td><td>24</td><td>6.4%</td><td>-0.21 [-0.72, 0.31]</td></tr> <tr><td>Kim JY et al.,2019</td><td>-2.7</td><td>6.7</td><td>37</td><td>-1.2</td><td>5.4</td><td>34</td><td>6.8%</td><td>-0.24 [-0.71, 0.22]</td></tr> <tr><td>Milne HM et al.,2008</td><td>-2.7</td><td>3.42</td><td>29</td><td>-0.5</td><td>4.73</td><td>29</td><td>6.3%</td><td>-0.53 [-1.05, -0.00]</td></tr> <tr><td>Nyrop KA et al.,2017</td><td>0.6</td><td>3.2</td><td>31</td><td>0.5</td><td>2.9</td><td>31</td><td>6.5%</td><td>0.03 [-0.47, 0.53]</td></tr> <tr><td>Pinto BM et al.,2013</td><td>-3.1</td><td>6.93</td><td>26</td><td>-2.8</td><td>4.91</td><td>20</td><td>5.9%</td><td>-0.05 [-0.63, 0.54]</td></tr> <tr><td>Rabin C et al.,2011</td><td>-11.4</td><td>11.7</td><td>8</td><td>-3.3</td><td>5.7</td><td>10</td><td>3.8%</td><td>-0.67 [-1.86, 0.51]</td></tr> <tr><td>Rogers LQ et al.,2014</td><td>0.4</td><td>1.9</td><td>22</td><td>-0.1</td><td>1.9</td><td>24</td><td>5.9%</td><td>0.26 [-0.32, 0.84]</td></tr> <tr><td>Rogers LQ et al.,2015a</td><td>-3.8</td><td>4.1</td><td>20</td><td>-1.1</td><td>6.4</td><td>24</td><td>5.8%</td><td>-0.48 [-1.09, 0.12]</td></tr> <tr><td>Vallance JK et al.,2007_combo</td><td>-3.6</td><td>8.3</td><td>93</td><td>-1.3</td><td>7.9</td><td>96</td><td>8.0%</td><td>-0.28 [-0.57, 0.00]</td></tr> <tr><td>Zhou Y et al.,2017</td><td>-4</td><td>9.5</td><td>74</td><td>-1.2</td><td>9.6</td><td>70</td><td>7.8%</td><td>-0.29 [-0.82, 0.04]</td></tr> <tr><td>Total (95% CI)</td><td></td><td></td><td>547</td><td></td><td></td><td>526</td><td>100.0%</td><td>-0.50 [-0.74, -0.26]</td></tr> </tbody> </table> <p>Heterogeneity: Tau² = 0.17; Chi² = 54.32, df = 16 (P < 0.00001); I² = 71% Test for overall effect: Z = 4.07 (P < 0.0001)</p> | | | | | Study or Subgroup | PA | | No PA | | Total | Weight | Std. Mean Difference IV, Random, 95% CI | Std. Mean Difference IV, Random, 95% CI | Mean | SD | Mean | SD | Alibhai SM et al.,2014 | -2.3 | 7.8 | 22 | -3.1 | 9.3 | 18 | 5.6% | 0.09 [-0.53, 0.72] | Bourke L et al.,2011 | -5 | 1.5 | 9 | -1 | 1.5 | 9 | 2.4% | -2.54 [-3.86, -1.22] | Broderick JM et al.,2013 | -6.2 | 4.1 | 21 | -2.3 | 2.8 | 19 | 5.3% | -1.08 [-1.75, -0.41] | Campbell KL et al.,2018 | -4.7 | 10.1 | 10 | -0.5 | 11.4 | 9 | 4.0% | -0.37 [-1.28, 0.54] | Cantarero-Villanueva I et al.,2011 | -2.3 | 2.3 | 38 | 0.2 | 1.8 | 40 | 6.8% | -1.20 [-1.69, -0.72] | Cantarero-Villanueva I et al.,2012 | -8 | 9.6 | 38 | -1.9 | 6.7 | 40 | 6.8% | -0.73 [-1.19, -0.27] | Cantarero-Villanueva I et al.,2013 | -2 | 1.7 | 32 | 0.3 | 1.4 | 29 | 6.0% | -1.45 [-2.02, -0.88] | Culos-Reed SN et al.,2010 | -0.3 | 1.6 | 37 | 0 | 1.1 | 24 | 6.4% | -0.21 [-0.72, 0.31] | Kim JY et al.,2019 | -2.7 | 6.7 | 37 | -1.2 | 5.4 | 34 | 6.8% | -0.24 [-0.71, 0.22] | Milne HM et al.,2008 | -2.7 | 3.42 | 29 | -0.5 | 4.73 | 29 | 6.3% | -0.53 [-1.05, -0.00] | Nyrop KA et al.,2017 | 0.6 | 3.2 | 31 | 0.5 | 2.9 | 31 | 6.5% | 0.03 [-0.47, 0.53] | Pinto BM et al.,2013 | -3.1 | 6.93 | 26 | -2.8 | 4.91 | 20 | 5.9% | -0.05 [-0.63, 0.54] | Rabin C et al.,2011 | -11.4 | 11.7 | 8 | -3.3 | 5.7 | 10 | 3.8% | -0.67 [-1.86, 0.51] | Rogers LQ et al.,2014 | 0.4 | 1.9 | 22 | -0.1 | 1.9 | 24 | 5.9% | 0.26 [-0.32, 0.84] | Rogers LQ et al.,2015a | -3.8 | 4.1 | 20 | -1.1 | 6.4 | 24 | 5.8% | -0.48 [-1.09, 0.12] | Vallance JK et al.,2007_combo | -3.6 | 8.3 | 93 | -1.3 | 7.9 | 96 | 8.0% | -0.28 [-0.57, 0.00] | Zhou Y et al.,2017 | -4 | 9.5 | 74 | -1.2 | 9.6 | 70 | 7.8% | -0.29 [-0.82, 0.04] | Total (95% CI) | | | 547 | | | 526 | 100.0% | -0.50 [-0.74, -0.26] |
| Study or Subgroup | PA | | No PA | | Total | | Weight | Std. Mean Difference IV, Random, 95% CI | Std. Mean Difference IV, Random, 95% CI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mean | SD | Mean | SD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alibhai SM et al.,2014 | -2.3 | 7.8 | 22 | -3.1 | 9.3 | 18 | 5.6% | 0.09 [-0.53, 0.72] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bourke L et al.,2011 | -5 | 1.5 | 9 | -1 | 1.5 | 9 | 2.4% | -2.54 [-3.86, -1.22] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Broderick JM et al.,2013 | -6.2 | 4.1 | 21 | -2.3 | 2.8 | 19 | 5.3% | -1.08 [-1.75, -0.41] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Campbell KL et al.,2018 | -4.7 | 10.1 | 10 | -0.5 | 11.4 | 9 | 4.0% | -0.37 [-1.28, 0.54] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cantarero-Villanueva I et al.,2011 | -2.3 | 2.3 | 38 | 0.2 | 1.8 | 40 | 6.8% | -1.20 [-1.69, -0.72] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cantarero-Villanueva I et al.,2012 | -8 | 9.6 | 38 | -1.9 | 6.7 | 40 | 6.8% | -0.73 [-1.19, -0.27] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cantarero-Villanueva I et al.,2013 | -2 | 1.7 | 32 | 0.3 | 1.4 | 29 | 6.0% | -1.45 [-2.02, -0.88] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Culos-Reed SN et al.,2010 | -0.3 | 1.6 | 37 | 0 | 1.1 | 24 | 6.4% | -0.21 [-0.72, 0.31] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kim JY et al.,2019 | -2.7 | 6.7 | 37 | -1.2 | 5.4 | 34 | 6.8% | -0.24 [-0.71, 0.22] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Milne HM et al.,2008 | -2.7 | 3.42 | 29 | -0.5 | 4.73 | 29 | 6.3% | -0.53 [-1.05, -0.00] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nyrop KA et al.,2017 | 0.6 | 3.2 | 31 | 0.5 | 2.9 | 31 | 6.5% | 0.03 [-0.47, 0.53] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pinto BM et al.,2013 | -3.1 | 6.93 | 26 | -2.8 | 4.91 | 20 | 5.9% | -0.05 [-0.63, 0.54] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rabin C et al.,2011 | -11.4 | 11.7 | 8 | -3.3 | 5.7 | 10 | 3.8% | -0.67 [-1.86, 0.51] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2014 | 0.4 | 1.9 | 22 | -0.1 | 1.9 | 24 | 5.9% | 0.26 [-0.32, 0.84] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2015a | -3.8 | 4.1 | 20 | -1.1 | 6.4 | 24 | 5.8% | -0.48 [-1.09, 0.12] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vallance JK et al.,2007_combo | -3.6 | 8.3 | 93 | -1.3 | 7.9 | 96 | 8.0% | -0.28 [-0.57, 0.00] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zhou Y et al.,2017 | -4 | 9.5 | 74 | -1.2 | 9.6 | 70 | 7.8% | -0.29 [-0.82, 0.04] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total (95% CI) | | | 547 | | | 526 | 100.0% | -0.50 [-0.74, -0.26] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funnel plot | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| コメント：ファンネルプロットからは出版バイアスは見られない。 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| その他の解析 | | | | | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| メタリグレッション | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 感度分析 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| CQ | | 運動習慣のない18～64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--|--|-----------------------------|-------|--|-------------------|---------------|--|--|-------|--|--|--------|--|------|----|-------|------|----|-------|------------------------|---|-----|----|------|-----|----|-------|--------------------|-------------------------|------|---|----|------|-----|---|------|---------------------|-----------------------|------|-----|----|-----|-----|----|-------|----------------------|---------------------------|------|-----|----|---|-----|----|-------|---------------------|-----------------------|------|-----|----|------|-----|----|-------|----------------------|-----------------------|--|--|------------|--|--|------------|---------------|-----------------------------|
| P | 運動習慣のない18～64歳のがんサバイバー | I | 運動推奨あり | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 運動推奨なし | O | うつ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 研究デザイン | RCT | 文献数 | 5 | コード | Alibhai SM et al.,2014 Campbell KL et al.,2018 Carter SJ et al.,2018 Culos-Reed SN et al.,2010 Saxton JM et al.,2014 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| モデル | ランダム効果モデル | 方法 | 分散逆数法 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 効果指標 | SMD | 統合値 | -0.39 (-0.68--0.10) P=0.008 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forest plot | <table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="3">PA</th> <th colspan="3">No PA</th> <th rowspan="2">Weight</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> </tr> <tr> <th>Mean</th> <th>SD</th> <th>Total</th> <th>Mean</th> <th>SD</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Alibhai SM et al.,2014</td> <td>0</td> <td>2.7</td> <td>22</td> <td>-0.3</td> <td>2.5</td> <td>18</td> <td>18.8%</td> <td>0.11 [-0.51, 0.74]</td> </tr> <tr> <td>Campbell KL et al.,2018</td> <td>-1.3</td> <td>3</td> <td>10</td> <td>-0.3</td> <td>1.3</td> <td>9</td> <td>9.5%</td> <td>-0.41 [-1.32, 0.51]</td> </tr> <tr> <td>Carter SJ et al.,2018</td> <td>-2.4</td> <td>4.2</td> <td>16</td> <td>0.5</td> <td>1.3</td> <td>11</td> <td>11.9%</td> <td>-0.84 [-1.64, -0.03]</td> </tr> <tr> <td>Culos-Reed SN et al.,2010</td> <td>-0.4</td> <td>4.7</td> <td>37</td> <td>1</td> <td>4.9</td> <td>24</td> <td>25.9%</td> <td>-0.29 [-0.81, 0.23]</td> </tr> <tr> <td>Saxton JM et al.,2014</td> <td>-6.1</td> <td>6.9</td> <td>44</td> <td>-2.3</td> <td>5.8</td> <td>41</td> <td>33.9%</td> <td>-0.59 [-1.02, -0.15]</td> </tr> <tr> <td>Total (95% CI)</td> <td></td> <td></td> <td>129</td> <td></td> <td></td> <td>103</td> <td>100.0%</td> <td>-0.39 [-0.68, -0.10]</td> </tr> </tbody> </table> <p>Heterogeneity: Tau² = 0.02; Chi² = 4.64, df = 4 (P = 0.33); I² = 14% Test for overall effect: Z = 2.64 (P = 0.008)</p> | | | | | Study or Subgroup | PA | | | No PA | | | Weight | Std. Mean Difference IV, Random, 95% CI | Mean | SD | Total | Mean | SD | Total | Alibhai SM et al.,2014 | 0 | 2.7 | 22 | -0.3 | 2.5 | 18 | 18.8% | 0.11 [-0.51, 0.74] | Campbell KL et al.,2018 | -1.3 | 3 | 10 | -0.3 | 1.3 | 9 | 9.5% | -0.41 [-1.32, 0.51] | Carter SJ et al.,2018 | -2.4 | 4.2 | 16 | 0.5 | 1.3 | 11 | 11.9% | -0.84 [-1.64, -0.03] | Culos-Reed SN et al.,2010 | -0.4 | 4.7 | 37 | 1 | 4.9 | 24 | 25.9% | -0.29 [-0.81, 0.23] | Saxton JM et al.,2014 | -6.1 | 6.9 | 44 | -2.3 | 5.8 | 41 | 33.9% | -0.59 [-1.02, -0.15] | Total (95% CI) | | | 129 | | | 103 | 100.0% | -0.39 [-0.68, -0.10] |
| Study or Subgroup | PA | | | No PA | | | Weight | Std. Mean Difference IV, Random, 95% CI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mean | SD | Total | Mean | SD | Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alibhai SM et al.,2014 | 0 | 2.7 | 22 | -0.3 | 2.5 | 18 | 18.8% | 0.11 [-0.51, 0.74] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Campbell KL et al.,2018 | -1.3 | 3 | 10 | -0.3 | 1.3 | 9 | 9.5% | -0.41 [-1.32, 0.51] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carter SJ et al.,2018 | -2.4 | 4.2 | 16 | 0.5 | 1.3 | 11 | 11.9% | -0.84 [-1.64, -0.03] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Culos-Reed SN et al.,2010 | -0.4 | 4.7 | 37 | 1 | 4.9 | 24 | 25.9% | -0.29 [-0.81, 0.23] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Saxton JM et al.,2014 | -6.1 | 6.9 | 44 | -2.3 | 5.8 | 41 | 33.9% | -0.59 [-1.02, -0.15] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total (95% CI) | | | 129 | | | 103 | 100.0% | -0.39 [-0.68, -0.10] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funnel plot | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | コメント：ファンネルプロットからは出版バイアスは見られない。 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| その他の解析 | | | | | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| メタリグレーション | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 感度分析 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| CQ | | 運動習慣のない18~64歳のがんサバイバーにおいて、運動を勧めることが推奨されるか？ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|----------------------------|------------|---|---------------------|---------------------|--|------------|--|--------|------------|--|------------|--------|-------|--------|-------|---------------------|---------------------|------------------------------|--|--|--|--|--|--|--|--|--------------------------|---|----|---|----|------|------|---------------|--|------------------------------|---|----|---|----|------|-------|----------------|--|------------------------------------|---|----|---|----|------|------|----------------|--|------------------------------------|---|----|---|----|------|------|----------------|--|------------------------------------|---|----|---|----|------|------|---------------|--|-------------------------|---|----|---|----|------|------|---------------|--|-------------------------|---|----|---|----|------|------|---------------|--|------------------------|---|----|---|----|------|------|---------------|--|------------------------------|---|----|---|----|------|------|--------------|--|-----------------------|---|----|---|----|------|------|---------------|--|-----------------------|---|---|---|---|------|------|---------------|--|-------------------------|---|----|---|----|------|------|---------------|--|----------------------|---|----|---|----|------|------|----------------|--|-------------------------|----|----|----|----|-------|------|--------------|--|------------------------|---|----|---|----|------|-------|----------------|--|------------------------|---|----|---|----|------|------|----------------|--|-----------------------------|---|----|---|---|------|------|---------------|--|-----------------------|---|----|---|----|------|------|---------------|--|-----------------------|---|----|---|----|------|------|--------------|--|------------------------|----|-----|---|-----|------|-------|---------------|--|------------------------------|---|----|---|----|------|------|---------------|--|--------------------------|--|------------|--|------------|---------------|-------------|---------------------|--|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|
| P | 運動習慣のない18~64歳のがんサバイバー | I | 運動推奨あり | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 運動推奨なし | O | 有害事象 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 研究デザイン | RCT | 文献数 | 21 | コード | Broderick JM et al.,2013 Brown JC et al.,2012_weight1 Cantarero-Villanueva I et al.,2011 Cantarero-Villanueva I et al.,2013 Cantarero-Villanueva I et al.,2016 Courneya KS et al.,2003 Crawford JJ et al.,2017 Fairley AS et al.,2005 Galvao DA et al.,2014_impact Gaskin CJ et al.,2016 Gaskin CJ et al.,2017 Greenlee HA et al.,2013 Irwin ML et al.,2008 Kenfield SA et al.,2019 Mulero PA et al.,2008_gym O'Neill LM et al.,2018 O'Neill RF et al.,2015 Rogers LQ et al.,2013 Rogers LQ et al.,2014 Rogers LQ et al.,2015b Winters-Stone KM et al.,2014 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| モデル | ランダム効果モデル | 方法 | 分散逆数法 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 効果指標 | Risk Ratio | 統合値 | 2.83 (1.79-4.45) P<0.00001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forest plot | <table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="2">PA</th> <th colspan="2">No PA</th> <th rowspan="2">Weight</th> <th colspan="2">Risk Ratio</th> <th rowspan="2">Risk Ratio</th> </tr> <tr> <th>Events</th> <th>Total</th> <th>Events</th> <th>Total</th> <th>M-H, Random, 95% CI</th> <th>M-H, Random, 95% CI</th> </tr> </thead> <tbody> <tr> <td colspan="9">1.10.1 With estimates</td> </tr> <tr> <td>Broderick JM et al.,2013</td> <td>1</td> <td>23</td> <td>0</td> <td>20</td> <td>2.0%</td> <td>2.63</td> <td>[0.11, 61.05]</td> <td></td> </tr> <tr> <td>Brown JC et al.,2012_weight1</td> <td>6</td> <td>59</td> <td>0</td> <td>70</td> <td>2.4%</td> <td>15.38</td> <td>[0.88, 267.50]</td> <td></td> </tr> <tr> <td>Cantarero-Villanueva I et al.,2011</td> <td>3</td> <td>38</td> <td>0</td> <td>40</td> <td>2.3%</td> <td>7.36</td> <td>[0.34, 137.90]</td> <td></td> </tr> <tr> <td>Cantarero-Villanueva I et al.,2013</td> <td>3</td> <td>32</td> <td>0</td> <td>29</td> <td>2.3%</td> <td>6.36</td> <td>[0.34, 118.18]</td> <td></td> </tr> <tr> <td>Cantarero-Villanueva I et al.,2016</td> <td>9</td> <td>21</td> <td>1</td> <td>19</td> <td>4.7%</td> <td>8.14</td> <td>[1.13, 58.42]</td> <td></td> </tr> <tr> <td>Courneya KS et al.,2003</td> <td>5</td> <td>24</td> <td>2</td> <td>28</td> <td>7.1%</td> <td>2.92</td> <td>[0.62, 13.69]</td> <td></td> </tr> <tr> <td>Crawford JJ et al.,2017</td> <td>1</td> <td>24</td> <td>0</td> <td>11</td> <td>2.0%</td> <td>1.44</td> <td>[0.06, 32.90]</td> <td></td> </tr> <tr> <td>Fairley AS et al.,2005</td> <td>5</td> <td>24</td> <td>2</td> <td>28</td> <td>7.1%</td> <td>2.92</td> <td>[0.62, 13.69]</td> <td></td> </tr> <tr> <td>Galvao DA et al.,2014_impact</td> <td>2</td> <td>54</td> <td>2</td> <td>48</td> <td>4.9%</td> <td>0.89</td> <td>[0.13, 6.07]</td> <td></td> </tr> <tr> <td>Gaskin CJ et al.,2016</td> <td>1</td> <td>53</td> <td>1</td> <td>86</td> <td>2.6%</td> <td>1.25</td> <td>[0.08, 19.44]</td> <td></td> </tr> <tr> <td>Gaskin CJ et al.,2017</td> <td>1</td> <td>8</td> <td>0</td> <td>7</td> <td>2.1%</td> <td>2.67</td> <td>[0.13, 56.63]</td> <td></td> </tr> <tr> <td>Greenlee HA et al.,2013</td> <td>2</td> <td>22</td> <td>0</td> <td>20</td> <td>2.2%</td> <td>4.57</td> <td>[0.23, 89.72]</td> <td></td> </tr> <tr> <td>Irwin ML et al.,2008</td> <td>2</td> <td>37</td> <td>0</td> <td>38</td> <td>2.2%</td> <td>5.13</td> <td>[0.25, 103.41]</td> <td></td> </tr> <tr> <td>Kenfield SA et al.,2019</td> <td>25</td> <td>37</td> <td>18</td> <td>39</td> <td>31.3%</td> <td>1.46</td> <td>[0.98, 2.20]</td> <td></td> </tr> <tr> <td>O'Neill LM et al.,2018</td> <td>5</td> <td>21</td> <td>0</td> <td>22</td> <td>2.4%</td> <td>11.50</td> <td>[0.67, 195.94]</td> <td></td> </tr> <tr> <td>O'Neill RF et al.,2015</td> <td>3</td> <td>47</td> <td>0</td> <td>47</td> <td>2.3%</td> <td>7.00</td> <td>[0.37, 131.99]</td> <td></td> </tr> <tr> <td>Portela ALM et al.,2008_gym</td> <td>4</td> <td>16</td> <td>0</td> <td>9</td> <td>2.4%</td> <td>5.29</td> <td>[0.32, 88.41]</td> <td></td> </tr> <tr> <td>Rogers LQ et al.,2013</td> <td>2</td> <td>15</td> <td>0</td> <td>13</td> <td>2.2%</td> <td>4.38</td> <td>[0.23, 83.62]</td> <td></td> </tr> <tr> <td>Rogers LQ et al.,2014</td> <td>2</td> <td>22</td> <td>2</td> <td>24</td> <td>5.2%</td> <td>1.09</td> <td>[0.17, 7.10]</td> <td></td> </tr> <tr> <td>Rogers LQ et al.,2015b</td> <td>20</td> <td>110</td> <td>2</td> <td>112</td> <td>8.1%</td> <td>10.18</td> <td>[2.44, 42.53]</td> <td></td> </tr> <tr> <td>Winters-Stone KM et al.,2014</td> <td>2</td> <td>29</td> <td>0</td> <td>22</td> <td>2.2%</td> <td>3.83</td> <td>[0.19, 76.03]</td> <td></td> </tr> <tr> <td>Subtotal (95% CI)</td> <td></td> <td>716</td> <td></td> <td>712</td> <td>100.0%</td> <td>2.83</td> <td>[1.79, 4.45]</td> <td></td> </tr> <tr> <td colspan="9">Total events: PA 104, No PA 30</td> </tr> <tr> <td colspan="9">Heterogeneity: Tau² = 0.13, Chi² = 22.95, df = 20 (P = 0.29), I² = 13%</td> </tr> <tr> <td colspan="9">Test for overall effect: Z = 4.48 (P < 0.00001)</td> </tr> </tbody> </table> | | | | | Study or Subgroup | PA | | No PA | | Weight | Risk Ratio | | Risk Ratio | Events | Total | Events | Total | M-H, Random, 95% CI | M-H, Random, 95% CI | 1.10.1 With estimates | | | | | | | | | Broderick JM et al.,2013 | 1 | 23 | 0 | 20 | 2.0% | 2.63 | [0.11, 61.05] | | Brown JC et al.,2012_weight1 | 6 | 59 | 0 | 70 | 2.4% | 15.38 | [0.88, 267.50] | | Cantarero-Villanueva I et al.,2011 | 3 | 38 | 0 | 40 | 2.3% | 7.36 | [0.34, 137.90] | | Cantarero-Villanueva I et al.,2013 | 3 | 32 | 0 | 29 | 2.3% | 6.36 | [0.34, 118.18] | | Cantarero-Villanueva I et al.,2016 | 9 | 21 | 1 | 19 | 4.7% | 8.14 | [1.13, 58.42] | | Courneya KS et al.,2003 | 5 | 24 | 2 | 28 | 7.1% | 2.92 | [0.62, 13.69] | | Crawford JJ et al.,2017 | 1 | 24 | 0 | 11 | 2.0% | 1.44 | [0.06, 32.90] | | Fairley AS et al.,2005 | 5 | 24 | 2 | 28 | 7.1% | 2.92 | [0.62, 13.69] | | Galvao DA et al.,2014_impact | 2 | 54 | 2 | 48 | 4.9% | 0.89 | [0.13, 6.07] | | Gaskin CJ et al.,2016 | 1 | 53 | 1 | 86 | 2.6% | 1.25 | [0.08, 19.44] | | Gaskin CJ et al.,2017 | 1 | 8 | 0 | 7 | 2.1% | 2.67 | [0.13, 56.63] | | Greenlee HA et al.,2013 | 2 | 22 | 0 | 20 | 2.2% | 4.57 | [0.23, 89.72] | | Irwin ML et al.,2008 | 2 | 37 | 0 | 38 | 2.2% | 5.13 | [0.25, 103.41] | | Kenfield SA et al.,2019 | 25 | 37 | 18 | 39 | 31.3% | 1.46 | [0.98, 2.20] | | O'Neill LM et al.,2018 | 5 | 21 | 0 | 22 | 2.4% | 11.50 | [0.67, 195.94] | | O'Neill RF et al.,2015 | 3 | 47 | 0 | 47 | 2.3% | 7.00 | [0.37, 131.99] | | Portela ALM et al.,2008_gym | 4 | 16 | 0 | 9 | 2.4% | 5.29 | [0.32, 88.41] | | Rogers LQ et al.,2013 | 2 | 15 | 0 | 13 | 2.2% | 4.38 | [0.23, 83.62] | | Rogers LQ et al.,2014 | 2 | 22 | 2 | 24 | 5.2% | 1.09 | [0.17, 7.10] | | Rogers LQ et al.,2015b | 20 | 110 | 2 | 112 | 8.1% | 10.18 | [2.44, 42.53] | | Winters-Stone KM et al.,2014 | 2 | 29 | 0 | 22 | 2.2% | 3.83 | [0.19, 76.03] | | Subtotal (95% CI) | | 716 | | 712 | 100.0% | 2.83 | [1.79, 4.45] | | Total events: PA 104, No PA 30 | | | | | | | | | Heterogeneity: Tau ² = 0.13, Chi ² = 22.95, df = 20 (P = 0.29), I ² = 13% | | | | | | | | | Test for overall effect: Z = 4.48 (P < 0.00001) | | | | | | | | |
| Study or Subgroup | PA | | No PA | | Weight | | Risk Ratio | | Risk Ratio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Events | Total | Events | Total | | M-H, Random, 95% CI | M-H, Random, 95% CI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.10.1 With estimates | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Broderick JM et al.,2013 | 1 | 23 | 0 | 20 | 2.0% | 2.63 | [0.11, 61.05] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brown JC et al.,2012_weight1 | 6 | 59 | 0 | 70 | 2.4% | 15.38 | [0.88, 267.50] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cantarero-Villanueva I et al.,2011 | 3 | 38 | 0 | 40 | 2.3% | 7.36 | [0.34, 137.90] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cantarero-Villanueva I et al.,2013 | 3 | 32 | 0 | 29 | 2.3% | 6.36 | [0.34, 118.18] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cantarero-Villanueva I et al.,2016 | 9 | 21 | 1 | 19 | 4.7% | 8.14 | [1.13, 58.42] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Courneya KS et al.,2003 | 5 | 24 | 2 | 28 | 7.1% | 2.92 | [0.62, 13.69] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Crawford JJ et al.,2017 | 1 | 24 | 0 | 11 | 2.0% | 1.44 | [0.06, 32.90] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fairley AS et al.,2005 | 5 | 24 | 2 | 28 | 7.1% | 2.92 | [0.62, 13.69] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Galvao DA et al.,2014_impact | 2 | 54 | 2 | 48 | 4.9% | 0.89 | [0.13, 6.07] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gaskin CJ et al.,2016 | 1 | 53 | 1 | 86 | 2.6% | 1.25 | [0.08, 19.44] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gaskin CJ et al.,2017 | 1 | 8 | 0 | 7 | 2.1% | 2.67 | [0.13, 56.63] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Greenlee HA et al.,2013 | 2 | 22 | 0 | 20 | 2.2% | 4.57 | [0.23, 89.72] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Irwin ML et al.,2008 | 2 | 37 | 0 | 38 | 2.2% | 5.13 | [0.25, 103.41] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kenfield SA et al.,2019 | 25 | 37 | 18 | 39 | 31.3% | 1.46 | [0.98, 2.20] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| O'Neill LM et al.,2018 | 5 | 21 | 0 | 22 | 2.4% | 11.50 | [0.67, 195.94] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| O'Neill RF et al.,2015 | 3 | 47 | 0 | 47 | 2.3% | 7.00 | [0.37, 131.99] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portela ALM et al.,2008_gym | 4 | 16 | 0 | 9 | 2.4% | 5.29 | [0.32, 88.41] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2013 | 2 | 15 | 0 | 13 | 2.2% | 4.38 | [0.23, 83.62] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2014 | 2 | 22 | 2 | 24 | 5.2% | 1.09 | [0.17, 7.10] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2015b | 20 | 110 | 2 | 112 | 8.1% | 10.18 | [2.44, 42.53] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Winters-Stone KM et al.,2014 | 2 | 29 | 0 | 22 | 2.2% | 3.83 | [0.19, 76.03] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal (95% CI) | | 716 | | 712 | 100.0% | 2.83 | [1.79, 4.45] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total events: PA 104, No PA 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heterogeneity: Tau ² = 0.13, Chi ² = 22.95, df = 20 (P = 0.29), I ² = 13% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Test for overall effect: Z = 4.48 (P < 0.00001) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| コメント : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funnel plot | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| コメント : | ファンネルプロットからは出版バイアスは見られない。 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| その他の解析 | | | | | コメント : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| メタリグレーション | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 感度分析 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| CQ | | 運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|--|---|------------|----------------------------|--|-------------------|---------------|--|--|-------|--|--|--------|--|--|------|----|-------|------|----|-------|------------------------|-----|------|----|------|------|----|------|----------------------|--|----------------------|---|------|---|---|------|---|------|----------------------|--|--------------------------|-----|------|----|-----|-----|----|------|--------------------|--|----------------------|-----|-------|----|-----|------|----|------|---------------------|--|-------------------------|-----|------|----|-----|-----|----|------|-------------------|--|---------------------------|-----|------|----|-------|------|----|------|----------------------|--|------------------------|------|------|-----|------|------|-----|------|--------------------|--|--------------------|-----|-----|----|-----|------|----|------|--------------------|--|-----------------------------|------|-------|----|------|-------|----|------|--------------------|--|----------------------|------|-------|----|----|------|----|------|-------------------|--|-------------------------|------|------|----|-------|------|----|------|-------------------|--|----------------------|------|-------|----|------|-------|----|------|--------------------|--|----------------------|---|-------|----|-----|-------|----|------|--------------------|--|--------------------|-------|------|----|-------|------|----|------|--------------------|--|---------------------|------|------|----|-----|------|----|------|-------------------|--|-------------------------------|-----|-------|----|-----|------|----|------|-------------------|--|--------------------|-----|------|----|----|------|----|------|-------------------|--|-----------------------|--|--|------------|--|--|------------|---------------|--------------------------|--|
| P | 運動習慣のない65歳以上のがんサバイバー | | I | 運動推奨あり | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 運動推奨なし | | O | QOL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 研究デザイン | RCT | 文献数 | 18 | コード | Alibhai SM et al.,2014 Bourke L et al.,2011 Broderick JM et al.,2013 Courneya KS et al.,2003 Culos-Reed SN et al.,2010 Goodwin PJ et al.,2014 Kim JY et al.,2019 Campo RA et al.,2011 McNeil J et al.,2019_highPA Milne HM et al.,2008 Murtezani A et al.,2014 Nyrop KA et al.,2017 Pinto BM et al.,2013 Pisu M et al.,2017 Scott E et al.,2013 Vallance JK et al.,2007_combo Zhou Y et al.,2017 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| モデル | ランダム効果モデル | | 方法 | 分散逆数法 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 効果指標 | SMD | | 統合値 | 0.70 (0.23-1.17) P=0.00001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forest plot | <table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="3">PA</th> <th colspan="3">No PA</th> <th rowspan="2">Weight</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> </tr> <tr> <th>Mean</th> <th>SD</th> <th>Total</th> <th>Mean</th> <th>SD</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Alibhai SM et al.,2014</td> <td>0.5</td> <td>12.7</td> <td>22</td> <td>11.7</td> <td>20.1</td> <td>18</td> <td>5.8%</td> <td>-0.67 [-1.31, -0.03]</td> <td></td> </tr> <tr> <td>Bourke L et al.,2011</td> <td>0</td> <td>1.53</td> <td>9</td> <td>4</td> <td>4.08</td> <td>9</td> <td>5.0%</td> <td>-1.24 [-2.27, -0.21]</td> <td></td> </tr> <tr> <td>Broderick JM et al.,2013</td> <td>4.8</td> <td>8.79</td> <td>21</td> <td>4.2</td> <td>8.3</td> <td>19</td> <td>5.9%</td> <td>0.07 [-0.55, 0.69]</td> <td></td> </tr> <tr> <td>Campo RA et al.,2011</td> <td>1.7</td> <td>10.78</td> <td>29</td> <td>3.2</td> <td>7.99</td> <td>25</td> <td>6.0%</td> <td>-0.15 [-0.89, 0.38]</td> <td></td> </tr> <tr> <td>Courneya KS et al.,2003</td> <td>9.1</td> <td>14.1</td> <td>24</td> <td>0.3</td> <td>8.5</td> <td>28</td> <td>6.0%</td> <td>0.76 [0.19, 1.32]</td> <td></td> </tr> <tr> <td>Culos-Reed SN et al.,2010</td> <td>2.7</td> <td>0.92</td> <td>53</td> <td>-2.33</td> <td>0.89</td> <td>47</td> <td>5.3%</td> <td>-5.54 [-6.66, -4.41]</td> <td></td> </tr> <tr> <td>Goodwin PJ et al.,2014</td> <td>0.58</td> <td>1.58</td> <td>171</td> <td>0.44</td> <td>1.63</td> <td>167</td> <td>6.5%</td> <td>0.09 [-0.13, 0.30]</td> <td></td> </tr> <tr> <td>Kim JY et al.,2019</td> <td>2.9</td> <td>9.2</td> <td>37</td> <td>1.6</td> <td>11.3</td> <td>34</td> <td>6.1%</td> <td>0.13 [-0.34, 0.59]</td> <td></td> </tr> <tr> <td>McNeil J et al.,2019_highPA</td> <td>-1.1</td> <td>12.28</td> <td>15</td> <td>-1.9</td> <td>11.75</td> <td>13</td> <td>5.6%</td> <td>0.06 [-0.68, 0.81]</td> <td></td> </tr> <tr> <td>Milne HM et al.,2008</td> <td>12.6</td> <td>12.62</td> <td>29</td> <td>-3</td> <td>8.41</td> <td>29</td> <td>6.0%</td> <td>1.44 [0.85, 2.02]</td> <td></td> </tr> <tr> <td>Murtezani A et al.,2014</td> <td>9.06</td> <td>2.12</td> <td>30</td> <td>-0.51</td> <td>2.06</td> <td>32</td> <td>5.1%</td> <td>4.52 [3.56, 5.48]</td> <td></td> </tr> <tr> <td>Nyrop KA et al.,2017</td> <td>1.48</td> <td>13.06</td> <td>31</td> <td>0.07</td> <td>11.86</td> <td>31</td> <td>6.1%</td> <td>0.11 [-0.39, 0.61]</td> <td></td> </tr> <tr> <td>Pinto BM et al.,2013</td> <td>6</td> <td>11.32</td> <td>20</td> <td>5.5</td> <td>11.39</td> <td>26</td> <td>5.9%</td> <td>0.04 [-0.54, 0.63]</td> <td></td> </tr> <tr> <td>Pisu M et al.,2017</td> <td>-0.57</td> <td>4.69</td> <td>13</td> <td>-2.11</td> <td>5.89</td> <td>16</td> <td>5.8%</td> <td>0.28 [-0.46, 1.01]</td> <td></td> </tr> <tr> <td>Scott E et al.,2013</td> <td>13.3</td> <td>14.8</td> <td>47</td> <td>5.1</td> <td>10.7</td> <td>43</td> <td>6.2%</td> <td>0.63 [0.20, 1.05]</td> <td></td> </tr> <tr> <td>Vallance JK et al.,2007_combo</td> <td>6.9</td> <td>13.11</td> <td>93</td> <td>1.1</td> <td>0.99</td> <td>96</td> <td>6.4%</td> <td>0.63 [0.33, 0.92]</td> <td></td> </tr> <tr> <td>Zhou Y et al.,2017</td> <td>1.8</td> <td>9.06</td> <td>74</td> <td>-2</td> <td>9.65</td> <td>70</td> <td>6.3%</td> <td>0.40 [0.07, 0.73]</td> <td></td> </tr> <tr> <td>Total (95% CI)</td> <td></td> <td></td> <td>718</td> <td></td> <td></td> <td>703</td> <td>100.0%</td> <td>0.70 [0.23, 1.17]</td> <td></td> </tr> </tbody> </table> <p>Heterogeneity: Tau² = 0.89, Chi² = 258.52, df = 16 (P < 0.00001); I² = 94% Test for overall effect: Z = 2.91 (P = 0.004)</p> | | | | | Study or Subgroup | PA | | | No PA | | | Weight | Std. Mean Difference IV, Random, 95% CI | Std. Mean Difference IV, Random, 95% CI | Mean | SD | Total | Mean | SD | Total | Alibhai SM et al.,2014 | 0.5 | 12.7 | 22 | 11.7 | 20.1 | 18 | 5.8% | -0.67 [-1.31, -0.03] | | Bourke L et al.,2011 | 0 | 1.53 | 9 | 4 | 4.08 | 9 | 5.0% | -1.24 [-2.27, -0.21] | | Broderick JM et al.,2013 | 4.8 | 8.79 | 21 | 4.2 | 8.3 | 19 | 5.9% | 0.07 [-0.55, 0.69] | | Campo RA et al.,2011 | 1.7 | 10.78 | 29 | 3.2 | 7.99 | 25 | 6.0% | -0.15 [-0.89, 0.38] | | Courneya KS et al.,2003 | 9.1 | 14.1 | 24 | 0.3 | 8.5 | 28 | 6.0% | 0.76 [0.19, 1.32] | | Culos-Reed SN et al.,2010 | 2.7 | 0.92 | 53 | -2.33 | 0.89 | 47 | 5.3% | -5.54 [-6.66, -4.41] | | Goodwin PJ et al.,2014 | 0.58 | 1.58 | 171 | 0.44 | 1.63 | 167 | 6.5% | 0.09 [-0.13, 0.30] | | Kim JY et al.,2019 | 2.9 | 9.2 | 37 | 1.6 | 11.3 | 34 | 6.1% | 0.13 [-0.34, 0.59] | | McNeil J et al.,2019_highPA | -1.1 | 12.28 | 15 | -1.9 | 11.75 | 13 | 5.6% | 0.06 [-0.68, 0.81] | | Milne HM et al.,2008 | 12.6 | 12.62 | 29 | -3 | 8.41 | 29 | 6.0% | 1.44 [0.85, 2.02] | | Murtezani A et al.,2014 | 9.06 | 2.12 | 30 | -0.51 | 2.06 | 32 | 5.1% | 4.52 [3.56, 5.48] | | Nyrop KA et al.,2017 | 1.48 | 13.06 | 31 | 0.07 | 11.86 | 31 | 6.1% | 0.11 [-0.39, 0.61] | | Pinto BM et al.,2013 | 6 | 11.32 | 20 | 5.5 | 11.39 | 26 | 5.9% | 0.04 [-0.54, 0.63] | | Pisu M et al.,2017 | -0.57 | 4.69 | 13 | -2.11 | 5.89 | 16 | 5.8% | 0.28 [-0.46, 1.01] | | Scott E et al.,2013 | 13.3 | 14.8 | 47 | 5.1 | 10.7 | 43 | 6.2% | 0.63 [0.20, 1.05] | | Vallance JK et al.,2007_combo | 6.9 | 13.11 | 93 | 1.1 | 0.99 | 96 | 6.4% | 0.63 [0.33, 0.92] | | Zhou Y et al.,2017 | 1.8 | 9.06 | 74 | -2 | 9.65 | 70 | 6.3% | 0.40 [0.07, 0.73] | | Total (95% CI) | | | 718 | | | 703 | 100.0% | 0.70 [0.23, 1.17] | |
| Study or Subgroup | PA | | | No PA | | | Weight | Std. Mean Difference IV, Random, 95% CI | Std. Mean Difference IV, Random, 95% CI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mean | SD | Total | Mean | SD | Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alibhai SM et al.,2014 | 0.5 | 12.7 | 22 | 11.7 | 20.1 | 18 | 5.8% | -0.67 [-1.31, -0.03] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bourke L et al.,2011 | 0 | 1.53 | 9 | 4 | 4.08 | 9 | 5.0% | -1.24 [-2.27, -0.21] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Broderick JM et al.,2013 | 4.8 | 8.79 | 21 | 4.2 | 8.3 | 19 | 5.9% | 0.07 [-0.55, 0.69] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Campo RA et al.,2011 | 1.7 | 10.78 | 29 | 3.2 | 7.99 | 25 | 6.0% | -0.15 [-0.89, 0.38] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Courneya KS et al.,2003 | 9.1 | 14.1 | 24 | 0.3 | 8.5 | 28 | 6.0% | 0.76 [0.19, 1.32] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Culos-Reed SN et al.,2010 | 2.7 | 0.92 | 53 | -2.33 | 0.89 | 47 | 5.3% | -5.54 [-6.66, -4.41] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Kim JY et al.,2019 | 2.9 | 9.2 | 37 | 1.6 | 11.3 | 34 | 6.1% | 0.13 [-0.34, 0.59] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| McNeil J et al.,2019_highPA | -1.1 | 12.28 | 15 | -1.9 | 11.75 | 13 | 5.6% | 0.06 [-0.68, 0.81] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Milne HM et al.,2008 | 12.6 | 12.62 | 29 | -3 | 8.41 | 29 | 6.0% | 1.44 [0.85, 2.02] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Murtezani A et al.,2014 | 9.06 | 2.12 | 30 | -0.51 | 2.06 | 32 | 5.1% | 4.52 [3.56, 5.48] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nyrop KA et al.,2017 | 1.48 | 13.06 | 31 | 0.07 | 11.86 | 31 | 6.1% | 0.11 [-0.39, 0.61] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pinto BM et al.,2013 | 6 | 11.32 | 20 | 5.5 | 11.39 | 26 | 5.9% | 0.04 [-0.54, 0.63] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pisu M et al.,2017 | -0.57 | 4.69 | 13 | -2.11 | 5.89 | 16 | 5.8% | 0.28 [-0.46, 1.01] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scott E et al.,2013 | 13.3 | 14.8 | 47 | 5.1 | 10.7 | 43 | 6.2% | 0.63 [0.20, 1.05] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vallance JK et al.,2007_combo | 6.9 | 13.11 | 93 | 1.1 | 0.99 | 96 | 6.4% | 0.63 [0.33, 0.92] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zhou Y et al.,2017 | 1.8 | 9.06 | 74 | -2 | 9.65 | 70 | 6.3% | 0.40 [0.07, 0.73] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total (95% CI) | | | 718 | | | 703 | 100.0% | 0.70 [0.23, 1.17] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funnel plot | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| コメント：ファンネルプロットからは出版バイアスは見られない。 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| その他の解析 | | | | | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| メタリグレーション | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 感度分析 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| CQ | | 運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|------------------------------|-------|---|-------------------|---------------|-----------------------------|--|--|--|--|-------|--------|--|--|------|----|-------|------|----|-------|------------------------|------|-----|----|------|-----|----|------|--------------------|--|----------------------|----|-----|---|----|-----|---|------|----------------------|--|--------------------------|------|-----|----|------|-----|----|------|----------------------|--|---------------------------|------|-----|----|---|-----|----|------|---------------------|--|--------------------|------|-----|----|------|-----|----|------|---------------------|--|----------------------|------|------|----|------|------|----|------|----------------------|--|----------------------|-----|-----|----|-----|-----|----|------|--------------------|--|----------------------|------|------|----|------|------|----|------|---------------------|--|-----------------------|-----|-----|----|------|-----|----|------|--------------------|--|------------------------|------|-----|----|------|-----|----|------|---------------------|--|-------------------------------|------|-----|----|------|-----|----|-------|---------------------|--|--------------------|----|-----|----|------|-----|----|-------|---------------------|--|-----------------------|--|--|------------|--|--|------------|---------------|-----------------------------|--|
| P | 運動習慣のない65歳以上のがんサバイバー | I | 運動推奨あり | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 運動推奨なし | O | 疲労 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 研究デザイン | RCT | 文献数 | 13 | コード | Alibhai SM et al.,2014 Bourke L et al.,2011 Broderick JM et al.,2013 Culos-Reed SN et al.,2010 Kim JY et al.,2019 Milne HM et al.,2008 Nyrop KA et al.,2017 Pinto BM et al.,2013 Rogers LQ et al.,2014 Rogers LQ et al.,2015a Vallance JK et al.,2007_combo Zhou Y et al.,2017 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| モデル | ランダム効果モデル | 方法 | 分散逆数法 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 効果指標 | SMD | 統合値 | -0.30 (-0.53--0.08) P<0.0001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forest plot | <table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="3">PA</th> <th colspan="3">No PA</th> <th rowspan="2">Total</th> <th rowspan="2">Weight</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> </tr> <tr> <th>Mean</th> <th>SD</th> <th>Total</th> <th>Mean</th> <th>SD</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Alibhai SM et al.,2014</td> <td>-2.3</td> <td>7.8</td> <td>22</td> <td>-3.1</td> <td>9.3</td> <td>18</td> <td>7.2%</td> <td>0.09 [-0.53, 0.72]</td> <td></td> </tr> <tr> <td>Bourke L et al.,2011</td> <td>-5</td> <td>1.5</td> <td>9</td> <td>-1</td> <td>1.5</td> <td>9</td> <td>2.5%</td> <td>-2.54 [-3.86, -1.22]</td> <td></td> </tr> <tr> <td>Broderick JM et al.,2013</td> <td>-6.2</td> <td>4.1</td> <td>21</td> <td>-2.3</td> <td>2.8</td> <td>19</td> <td>6.6%</td> <td>-1.08 [-1.75, -0.41]</td> <td></td> </tr> <tr> <td>Culos-Reed SN et al.,2010</td> <td>-0.3</td> <td>1.6</td> <td>37</td> <td>0</td> <td>1.1</td> <td>24</td> <td>8.7%</td> <td>-0.21 [-0.72, 0.31]</td> <td></td> </tr> <tr> <td>Kim JY et al.,2019</td> <td>-2.7</td> <td>6.7</td> <td>37</td> <td>-1.2</td> <td>5.4</td> <td>34</td> <td>9.5%</td> <td>-0.24 [-0.71, 0.22]</td> <td></td> </tr> <tr> <td>Milne HM et al.,2008</td> <td>-2.7</td> <td>3.42</td> <td>29</td> <td>-0.5</td> <td>4.73</td> <td>29</td> <td>8.6%</td> <td>-0.53 [-1.05, -0.00]</td> <td></td> </tr> <tr> <td>Nyrop KA et al.,2017</td> <td>0.6</td> <td>3.2</td> <td>31</td> <td>0.5</td> <td>2.9</td> <td>31</td> <td>9.0%</td> <td>0.03 [-0.47, 0.53]</td> <td></td> </tr> <tr> <td>Pinto BM et al.,2013</td> <td>-3.1</td> <td>6.93</td> <td>26</td> <td>-2.8</td> <td>4.91</td> <td>20</td> <td>7.7%</td> <td>-0.05 [-0.63, 0.54]</td> <td></td> </tr> <tr> <td>Rogers LQ et al.,2014</td> <td>0.4</td> <td>1.9</td> <td>22</td> <td>-0.1</td> <td>1.9</td> <td>24</td> <td>7.8%</td> <td>0.26 [-0.32, 0.84]</td> <td></td> </tr> <tr> <td>Rogers LQ et al.,2015a</td> <td>-3.8</td> <td>4.1</td> <td>20</td> <td>-1.1</td> <td>6.4</td> <td>24</td> <td>7.5%</td> <td>-0.48 [-1.08, 0.12]</td> <td></td> </tr> <tr> <td>Vallance JK et al.,2007_combo</td> <td>-3.6</td> <td>8.3</td> <td>93</td> <td>-1.3</td> <td>7.9</td> <td>96</td> <td>12.8%</td> <td>-0.28 [-0.57, 0.00]</td> <td></td> </tr> <tr> <td>Zhou Y et al.,2017</td> <td>-4</td> <td>9.5</td> <td>74</td> <td>-1.2</td> <td>9.6</td> <td>70</td> <td>12.0%</td> <td>-0.29 [-0.62, 0.04]</td> <td></td> </tr> <tr> <td>Total (95% CI)</td> <td></td> <td></td> <td>421</td> <td></td> <td></td> <td>398</td> <td>100.0%</td> <td>-0.30 [-0.53, -0.08]</td> <td></td> </tr> </tbody> </table> <p>Heterogeneity: Tau² = 0.08, Chi² = 24.96, df = 11 (P = 0.009), I² = 56% Test for overall effect: Z = 2.64 (P = 0.008)</p> | | | | | Study or Subgroup | PA | | | No PA | | | Total | Weight | Std. Mean Difference IV, Random, 95% CI | Std. Mean Difference IV, Random, 95% CI | Mean | SD | Total | Mean | SD | Total | Alibhai SM et al.,2014 | -2.3 | 7.8 | 22 | -3.1 | 9.3 | 18 | 7.2% | 0.09 [-0.53, 0.72] | | Bourke L et al.,2011 | -5 | 1.5 | 9 | -1 | 1.5 | 9 | 2.5% | -2.54 [-3.86, -1.22] | | Broderick JM et al.,2013 | -6.2 | 4.1 | 21 | -2.3 | 2.8 | 19 | 6.6% | -1.08 [-1.75, -0.41] | | Culos-Reed SN et al.,2010 | -0.3 | 1.6 | 37 | 0 | 1.1 | 24 | 8.7% | -0.21 [-0.72, 0.31] | | Kim JY et al.,2019 | -2.7 | 6.7 | 37 | -1.2 | 5.4 | 34 | 9.5% | -0.24 [-0.71, 0.22] | | Milne HM et al.,2008 | -2.7 | 3.42 | 29 | -0.5 | 4.73 | 29 | 8.6% | -0.53 [-1.05, -0.00] | | Nyrop KA et al.,2017 | 0.6 | 3.2 | 31 | 0.5 | 2.9 | 31 | 9.0% | 0.03 [-0.47, 0.53] | | Pinto BM et al.,2013 | -3.1 | 6.93 | 26 | -2.8 | 4.91 | 20 | 7.7% | -0.05 [-0.63, 0.54] | | Rogers LQ et al.,2014 | 0.4 | 1.9 | 22 | -0.1 | 1.9 | 24 | 7.8% | 0.26 [-0.32, 0.84] | | Rogers LQ et al.,2015a | -3.8 | 4.1 | 20 | -1.1 | 6.4 | 24 | 7.5% | -0.48 [-1.08, 0.12] | | Vallance JK et al.,2007_combo | -3.6 | 8.3 | 93 | -1.3 | 7.9 | 96 | 12.8% | -0.28 [-0.57, 0.00] | | Zhou Y et al.,2017 | -4 | 9.5 | 74 | -1.2 | 9.6 | 70 | 12.0% | -0.29 [-0.62, 0.04] | | Total (95% CI) | | | 421 | | | 398 | 100.0% | -0.30 [-0.53, -0.08] | |
| Study or Subgroup | PA | | | No PA | | | Total | Weight | Std. Mean Difference IV, Random, 95% CI | Std. Mean Difference IV, Random, 95% CI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mean | SD | Total | Mean | SD | Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alibhai SM et al.,2014 | -2.3 | 7.8 | 22 | -3.1 | 9.3 | 18 | 7.2% | 0.09 [-0.53, 0.72] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bourke L et al.,2011 | -5 | 1.5 | 9 | -1 | 1.5 | 9 | 2.5% | -2.54 [-3.86, -1.22] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Broderick JM et al.,2013 | -6.2 | 4.1 | 21 | -2.3 | 2.8 | 19 | 6.6% | -1.08 [-1.75, -0.41] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Culos-Reed SN et al.,2010 | -0.3 | 1.6 | 37 | 0 | 1.1 | 24 | 8.7% | -0.21 [-0.72, 0.31] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kim JY et al.,2019 | -2.7 | 6.7 | 37 | -1.2 | 5.4 | 34 | 9.5% | -0.24 [-0.71, 0.22] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Milne HM et al.,2008 | -2.7 | 3.42 | 29 | -0.5 | 4.73 | 29 | 8.6% | -0.53 [-1.05, -0.00] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nyrop KA et al.,2017 | 0.6 | 3.2 | 31 | 0.5 | 2.9 | 31 | 9.0% | 0.03 [-0.47, 0.53] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pinto BM et al.,2013 | -3.1 | 6.93 | 26 | -2.8 | 4.91 | 20 | 7.7% | -0.05 [-0.63, 0.54] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2014 | 0.4 | 1.9 | 22 | -0.1 | 1.9 | 24 | 7.8% | 0.26 [-0.32, 0.84] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2015a | -3.8 | 4.1 | 20 | -1.1 | 6.4 | 24 | 7.5% | -0.48 [-1.08, 0.12] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vallance JK et al.,2007_combo | -3.6 | 8.3 | 93 | -1.3 | 7.9 | 96 | 12.8% | -0.28 [-0.57, 0.00] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zhou Y et al.,2017 | -4 | 9.5 | 74 | -1.2 | 9.6 | 70 | 12.0% | -0.29 [-0.62, 0.04] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total (95% CI) | | | 421 | | | 398 | 100.0% | -0.30 [-0.53, -0.08] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funnel plot | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | コメント：ファンネルプロットからは出版バイアスは見られない。 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| その他の解析 | | | | | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| メタリグレーション | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 感度分析 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| CQ | | 運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|----------------------------|--------|---|-------------------|---------------|--|--|-------|--|--|--------|--|------|----|-------|------|----|-------|------------------------|---|-----|----|------|-----|----|-------|--------------------|-----------------------|------|-----|----|-----|-----|----|-------|----------------------|---------------------------|------|-----|----|----|-----|----|-------|---------------------|-----------------------|------|-----|----|------|-----|----|-------|----------------------|-----------------------|--|--|------------|--|--|-----------|---------------|-----------------------------|
| P | 運動習慣のない65歳以上のがんサバイバー | | I | 運動推奨あり | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 運動推奨なし | | O | うつ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 研究デザイン | RCT | 文献数 | 4 | コード | Alibhai SM et al.,2014 Carter SJ et al.,2018 Culos-Reed SN et al.,2010 Saxton JM et al.,2014 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| モデル | ランダム効果モデル | 方法 | 分散逆数法 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 効果指標 | SMD | 統合値 | -0.39 (-0.74--0.03) P=0.03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forest plot | <table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="3">PA</th> <th colspan="3">No PA</th> <th rowspan="2">Weight</th> <th rowspan="2">Std. Mean Difference IV, Random, 95% CI</th> </tr> <tr> <th>Mean</th> <th>SD</th> <th>Total</th> <th>Mean</th> <th>SD</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Alibhai SM et al.,2014</td> <td>0</td> <td>2.7</td> <td>22</td> <td>-0.3</td> <td>2.5</td> <td>18</td> <td>22.2%</td> <td>0.11 [-0.51, 0.74]</td> </tr> <tr> <td>Carter SJ et al.,2018</td> <td>-2.4</td> <td>4.2</td> <td>16</td> <td>0.5</td> <td>1.3</td> <td>11</td> <td>15.2%</td> <td>-0.84 [-1.64, -0.03]</td> </tr> <tr> <td>Culos-Reed SN et al.,2010</td> <td>-0.4</td> <td>4.7</td> <td>37</td> <td>-1</td> <td>4.9</td> <td>24</td> <td>28.3%</td> <td>-0.29 [-0.81, 0.23]</td> </tr> <tr> <td>Saxton JM et al.,2014</td> <td>-6.1</td> <td>6.9</td> <td>44</td> <td>-2.3</td> <td>5.8</td> <td>41</td> <td>34.3%</td> <td>-0.59 [-1.02, -0.15]</td> </tr> <tr> <td>Total (95% CI)</td> <td></td> <td></td> <td>119</td> <td></td> <td></td> <td>94</td> <td>100.0%</td> <td>-0.39 [-0.74, -0.03]</td> </tr> </tbody> </table> <p>Heterogeneity: Tau² = 0.05; Chi² = 4.63, df = 3 (P = 0.20); I² = 35% Test for overall effect: Z = 2.14 (P = 0.03)</p> | | | | | Study or Subgroup | PA | | | No PA | | | Weight | Std. Mean Difference IV, Random, 95% CI | Mean | SD | Total | Mean | SD | Total | Alibhai SM et al.,2014 | 0 | 2.7 | 22 | -0.3 | 2.5 | 18 | 22.2% | 0.11 [-0.51, 0.74] | Carter SJ et al.,2018 | -2.4 | 4.2 | 16 | 0.5 | 1.3 | 11 | 15.2% | -0.84 [-1.64, -0.03] | Culos-Reed SN et al.,2010 | -0.4 | 4.7 | 37 | -1 | 4.9 | 24 | 28.3% | -0.29 [-0.81, 0.23] | Saxton JM et al.,2014 | -6.1 | 6.9 | 44 | -2.3 | 5.8 | 41 | 34.3% | -0.59 [-1.02, -0.15] | Total (95% CI) | | | 119 | | | 94 | 100.0% | -0.39 [-0.74, -0.03] |
| Study or Subgroup | PA | | | No PA | | | Weight | Std. Mean Difference IV, Random, 95% CI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mean | SD | Total | Mean | SD | Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alibhai SM et al.,2014 | 0 | 2.7 | 22 | -0.3 | 2.5 | 18 | 22.2% | 0.11 [-0.51, 0.74] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carter SJ et al.,2018 | -2.4 | 4.2 | 16 | 0.5 | 1.3 | 11 | 15.2% | -0.84 [-1.64, -0.03] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Culos-Reed SN et al.,2010 | -0.4 | 4.7 | 37 | -1 | 4.9 | 24 | 28.3% | -0.29 [-0.81, 0.23] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Saxton JM et al.,2014 | -6.1 | 6.9 | 44 | -2.3 | 5.8 | 41 | 34.3% | -0.59 [-1.02, -0.15] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total (95% CI) | | | 119 | | | 94 | 100.0% | -0.39 [-0.74, -0.03] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funnel plot | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | コメント：ファンネルプロットからは出版バイアスは見られない。 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| その他の解析 | | | | | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| メタリグレーション | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 感度分析 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| CQ | | 運動習慣のない65歳以上のがんサバイバーにおいて、運動を勧めることが推奨されるか？ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|----------------------------|-------------|--|-------------------|---------------------|----------|--------------|-------------|--------|------------|---------------------|------------------------------|--|--|--|--|--|--|--|--------------------------|---|----|---|----|------|------|---------------|------------------------------|---|----|---|----|------|-------|----------------|------------------------------------|---|----|---|----|------|------|---------------|-------------------------|---|----|---|----|------|------|---------------|-------------------------|---|----|---|----|------|------|---------------|-----------------------|---|----|---|----|------|------|---------------|------------------------------|---|----|---|----|------|------|--------------|-----------------------|---|----|---|----|------|------|---------------|-----------------------|---|---|---|---|------|------|---------------|-------------------------|---|----|---|----|------|------|---------------|----------------------|---|----|---|----|------|------|----------------|-------------------------|----|----|----|----|-------|------|--------------|------------------------|---|----|---|----|------|-------|----------------|------------------------|---|----|---|----|------|------|----------------|-----------------------------|---|----|---|---|------|------|---------------|-----------------------|---|----|---|----|------|------|---------------|-----------------------|---|----|---|----|------|------|--------------|------------------------|----|-----|---|-----|------|-------|---------------|------------------------------|---|----|---|----|------|------|---------------|--------------------------|--|------------|--|------------|---------------|-------------|---------------------|--------------|----|--|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| P | 運動習慣のない65歳以上のがんサバイバー | I | 運動推奨あり | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 運動推奨なし | O | 有害事象 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 研究デザイン | RCT | 文献数 | 19 | コード | Broderick JM et al.,2013 Brown JC et al.,2012_weight1 Cantarero-Villanueva I et al.,2016 Courneya KS et al.,2003 Crawford JJ et al.,2017 Fairey AS et al.,2005 Galvao DA et al.,2014_impact Gaskin CJ et al.,2016 Gaskin CJ et al.,2017 Greenlee HA et al.,2013 Irwin ML et al.,2008 Kenfield SA et al.,2019 Portela ALM et al.,2008_gym O'Neill LM et al.,2018 O'Neill RF et al.,2015 Rogers LQ et al.,2013 Rogers LQ et al.,2014 Rogers LQ et al.,2015b Winters-Stone KM et al.,2014 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| モデル | ランダム効果モデル | 方法 | 分散逆数法 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 効果指標 | Risk Ratio | 統合値 | 2.77 (1.72-4.47) P<0.00001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Forest plot | <table border="1"> <thead> <tr> <th>Study or Subgroup</th> <th>PA Events</th> <th>PA Total</th> <th>No PA Events</th> <th>No PA Total</th> <th>Weight</th> <th>Risk Ratio</th> <th>M-H, Random, 95% CI</th> </tr> </thead> <tbody> <tr> <td colspan="8">1,10,1 With estimates</td> </tr> <tr> <td>Broderick JM et al.,2013</td> <td>1</td> <td>23</td> <td>0</td> <td>20</td> <td>2.2%</td> <td>2.63</td> <td>[0.11, 61.05]</td> </tr> <tr> <td>Brown JC et al.,2012_weight1</td> <td>6</td> <td>59</td> <td>0</td> <td>70</td> <td>2.6%</td> <td>15.38</td> <td>[0.88, 267.50]</td> </tr> <tr> <td>Cantarero-Villanueva I et al.,2016</td> <td>9</td> <td>21</td> <td>1</td> <td>19</td> <td>5.1%</td> <td>8.14</td> <td>[1.13, 58.42]</td> </tr> <tr> <td>Courneya KS et al.,2003</td> <td>5</td> <td>24</td> <td>2</td> <td>28</td> <td>7.7%</td> <td>2.92</td> <td>[0.62, 13.68]</td> </tr> <tr> <td>Crawford JJ et al.,2017</td> <td>1</td> <td>24</td> <td>0</td> <td>11</td> <td>2.2%</td> <td>1.44</td> <td>[0.06, 32.80]</td> </tr> <tr> <td>Fairey AS et al.,2005</td> <td>5</td> <td>24</td> <td>2</td> <td>28</td> <td>7.7%</td> <td>2.92</td> <td>[0.62, 13.68]</td> </tr> <tr> <td>Galvao DA et al.,2014_impact</td> <td>2</td> <td>54</td> <td>2</td> <td>48</td> <td>5.3%</td> <td>0.89</td> <td>[0.13, 6.07]</td> </tr> <tr> <td>Gaskin CJ et al.,2016</td> <td>1</td> <td>53</td> <td>1</td> <td>66</td> <td>2.8%</td> <td>1.25</td> <td>[0.08, 19.44]</td> </tr> <tr> <td>Gaskin CJ et al.,2017</td> <td>1</td> <td>8</td> <td>0</td> <td>7</td> <td>2.3%</td> <td>2.67</td> <td>[0.13, 56.63]</td> </tr> <tr> <td>Greenlee HA et al.,2013</td> <td>2</td> <td>22</td> <td>0</td> <td>20</td> <td>2.4%</td> <td>4.57</td> <td>[0.23, 89.72]</td> </tr> <tr> <td>Irwin ML et al.,2008</td> <td>2</td> <td>37</td> <td>0</td> <td>36</td> <td>2.4%</td> <td>5.13</td> <td>[0.25, 103.41]</td> </tr> <tr> <td>Kenfield SA et al.,2019</td> <td>25</td> <td>37</td> <td>18</td> <td>39</td> <td>30.3%</td> <td>1.46</td> <td>[0.98, 2.20]</td> </tr> <tr> <td>O'Neill LM et al.,2018</td> <td>5</td> <td>21</td> <td>0</td> <td>22</td> <td>2.7%</td> <td>11.50</td> <td>[0.67, 195.94]</td> </tr> <tr> <td>O'Neill RF et al.,2015</td> <td>3</td> <td>47</td> <td>0</td> <td>47</td> <td>2.5%</td> <td>7.00</td> <td>[0.37, 131.89]</td> </tr> <tr> <td>Portela ALM et al.,2008_gym</td> <td>4</td> <td>16</td> <td>0</td> <td>9</td> <td>2.7%</td> <td>5.29</td> <td>[0.32, 88.41]</td> </tr> <tr> <td>Rogers LQ et al.,2013</td> <td>2</td> <td>15</td> <td>0</td> <td>13</td> <td>2.5%</td> <td>4.38</td> <td>[0.23, 83.62]</td> </tr> <tr> <td>Rogers LQ et al.,2014</td> <td>2</td> <td>22</td> <td>2</td> <td>24</td> <td>5.6%</td> <td>1.09</td> <td>[0.17, 7.10]</td> </tr> <tr> <td>Rogers LQ et al.,2015b</td> <td>20</td> <td>110</td> <td>2</td> <td>112</td> <td>8.7%</td> <td>10.18</td> <td>[2.44, 42.53]</td> </tr> <tr> <td>Winters-Stone KM et al.,2014</td> <td>2</td> <td>29</td> <td>0</td> <td>22</td> <td>2.4%</td> <td>3.83</td> <td>[0.19, 76.03]</td> </tr> <tr> <td>Subtotal (95% CI)</td> <td></td> <td>646</td> <td></td> <td>643</td> <td>100.0%</td> <td>2.77</td> <td>[1.72, 4.47]</td> </tr> <tr> <td>Total events</td> <td colspan="2">98</td> <td colspan="2">30</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Heterogeneity: Tau² = 0.15; Chi² = 21.35, df = 18 (P = 0.26); I² = 16%</td> <td colspan="6"></td> <td></td> </tr> <tr> <td>Test for overall effect: Z = 4.17 (P < 0.0001)</td> <td colspan="6"></td> <td></td> </tr> </tbody> </table> | | | | | Study or Subgroup | PA Events | PA Total | No PA Events | No PA Total | Weight | Risk Ratio | M-H, Random, 95% CI | 1,10,1 With estimates | | | | | | | | Broderick JM et al.,2013 | 1 | 23 | 0 | 20 | 2.2% | 2.63 | [0.11, 61.05] | Brown JC et al.,2012_weight1 | 6 | 59 | 0 | 70 | 2.6% | 15.38 | [0.88, 267.50] | Cantarero-Villanueva I et al.,2016 | 9 | 21 | 1 | 19 | 5.1% | 8.14 | [1.13, 58.42] | Courneya KS et al.,2003 | 5 | 24 | 2 | 28 | 7.7% | 2.92 | [0.62, 13.68] | Crawford JJ et al.,2017 | 1 | 24 | 0 | 11 | 2.2% | 1.44 | [0.06, 32.80] | Fairey AS et al.,2005 | 5 | 24 | 2 | 28 | 7.7% | 2.92 | [0.62, 13.68] | Galvao DA et al.,2014_impact | 2 | 54 | 2 | 48 | 5.3% | 0.89 | [0.13, 6.07] | Gaskin CJ et al.,2016 | 1 | 53 | 1 | 66 | 2.8% | 1.25 | [0.08, 19.44] | Gaskin CJ et al.,2017 | 1 | 8 | 0 | 7 | 2.3% | 2.67 | [0.13, 56.63] | Greenlee HA et al.,2013 | 2 | 22 | 0 | 20 | 2.4% | 4.57 | [0.23, 89.72] | Irwin ML et al.,2008 | 2 | 37 | 0 | 36 | 2.4% | 5.13 | [0.25, 103.41] | Kenfield SA et al.,2019 | 25 | 37 | 18 | 39 | 30.3% | 1.46 | [0.98, 2.20] | O'Neill LM et al.,2018 | 5 | 21 | 0 | 22 | 2.7% | 11.50 | [0.67, 195.94] | O'Neill RF et al.,2015 | 3 | 47 | 0 | 47 | 2.5% | 7.00 | [0.37, 131.89] | Portela ALM et al.,2008_gym | 4 | 16 | 0 | 9 | 2.7% | 5.29 | [0.32, 88.41] | Rogers LQ et al.,2013 | 2 | 15 | 0 | 13 | 2.5% | 4.38 | [0.23, 83.62] | Rogers LQ et al.,2014 | 2 | 22 | 2 | 24 | 5.6% | 1.09 | [0.17, 7.10] | Rogers LQ et al.,2015b | 20 | 110 | 2 | 112 | 8.7% | 10.18 | [2.44, 42.53] | Winters-Stone KM et al.,2014 | 2 | 29 | 0 | 22 | 2.4% | 3.83 | [0.19, 76.03] | Subtotal (95% CI) | | 646 | | 643 | 100.0% | 2.77 | [1.72, 4.47] | Total events | 98 | | 30 | | | | | Heterogeneity: Tau ² = 0.15; Chi ² = 21.35, df = 18 (P = 0.26); I ² = 16% | | | | | | | | Test for overall effect: Z = 4.17 (P < 0.0001) | | | | | | | |
| Study or Subgroup | PA Events | PA Total | No PA Events | No PA Total | Weight | Risk Ratio | M-H, Random, 95% CI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,10,1 With estimates | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Brown JC et al.,2012_weight1 | 6 | 59 | 0 | 70 | 2.6% | 15.38 | [0.88, 267.50] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cantarero-Villanueva I et al.,2016 | 9 | 21 | 1 | 19 | 5.1% | 8.14 | [1.13, 58.42] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Courneya KS et al.,2003 | 5 | 24 | 2 | 28 | 7.7% | 2.92 | [0.62, 13.68] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Crawford JJ et al.,2017 | 1 | 24 | 0 | 11 | 2.2% | 1.44 | [0.06, 32.80] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fairey AS et al.,2005 | 5 | 24 | 2 | 28 | 7.7% | 2.92 | [0.62, 13.68] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Galvao DA et al.,2014_impact | 2 | 54 | 2 | 48 | 5.3% | 0.89 | [0.13, 6.07] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gaskin CJ et al.,2016 | 1 | 53 | 1 | 66 | 2.8% | 1.25 | [0.08, 19.44] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gaskin CJ et al.,2017 | 1 | 8 | 0 | 7 | 2.3% | 2.67 | [0.13, 56.63] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Greenlee HA et al.,2013 | 2 | 22 | 0 | 20 | 2.4% | 4.57 | [0.23, 89.72] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Irwin ML et al.,2008 | 2 | 37 | 0 | 36 | 2.4% | 5.13 | [0.25, 103.41] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kenfield SA et al.,2019 | 25 | 37 | 18 | 39 | 30.3% | 1.46 | [0.98, 2.20] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| O'Neill LM et al.,2018 | 5 | 21 | 0 | 22 | 2.7% | 11.50 | [0.67, 195.94] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| O'Neill RF et al.,2015 | 3 | 47 | 0 | 47 | 2.5% | 7.00 | [0.37, 131.89] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portela ALM et al.,2008_gym | 4 | 16 | 0 | 9 | 2.7% | 5.29 | [0.32, 88.41] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2013 | 2 | 15 | 0 | 13 | 2.5% | 4.38 | [0.23, 83.62] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2014 | 2 | 22 | 2 | 24 | 5.6% | 1.09 | [0.17, 7.10] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rogers LQ et al.,2015b | 20 | 110 | 2 | 112 | 8.7% | 10.18 | [2.44, 42.53] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Winters-Stone KM et al.,2014 | 2 | 29 | 0 | 22 | 2.4% | 3.83 | [0.19, 76.03] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal (95% CI) | | 646 | | 643 | 100.0% | 2.77 | [1.72, 4.47] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total events | 98 | | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heterogeneity: Tau ² = 0.15; Chi ² = 21.35, df = 18 (P = 0.26); I ² = 16% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Test for overall effect: Z = 4.17 (P < 0.0001) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Funnel plot | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | コメント：ファンネルプロットからは出版バイアスは見られない。 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| その他の解析 | | | | | コメント： | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| メタリグレッション | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 感度分析 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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「科学的根拠に基づくがんサバイバーシップガイドライン提言に関する研究」班

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