Supplementary Materials for the REFORMS-SR Report

Appendix 1

Search Strategies

Ovid MEDLINE(R) ALL

(includes Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily and Ovid MEDLINE)

via Ovid http://ovidsp.ovid.com/

Date range searched: <1946 to June 29, 2021>

Date searched: 30th June 2021

Records retrieved: 6521

Search Strategy:

- 1 exp Rhabdomyosarcoma/ (10732)
- 2 *"Neoplasms, Connective and Soft Tissue"/ (207)
- 3 *Neoplasms, Adipose Tissue/ (182)
- 4 *Neoplasms, Connective Tissue/ (761)
- 5 *Neoplasms, Muscle Tissue/ (2264)
- 6 *Myosarcoma/ (229)
- 7 rhabdomyosarcoma*.ti,ab,kw,kf. (12424)

8 ((RMS or ERMS) and (embryonal or alveol* or botryoid* or pleomorphic or sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumo?r* or mass*)).ti,ab,kw,kf. (3067)

9 ((soft or muscle* or muscular) adj3 tissue* adj4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumo?r* or malignan* or mass* or growth* or nodule* or nodal* or lump* or lesion* or sw?ll* or inflam*)).ti,ab,kw,kf. (38437)

10 ((skelet* or musculoskelet* or striated or bone* or bony) adj3 (tissue* or muscle*) adj4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumo?r*)).ti,ab,kw,kf. (4875)

11 (connectiv* adj4 (tissue* or fiber* or fibr*) adj4 (sarcoma* or myosarcoma* or cancer* or neoplas* or tumo?r*)).ti,ab,kw,kf. (1650)

12 ((epithelia* or muscle* or nervous or adipose or elastic* or lymph*) adj3 (tissue* or fiber* or fibr*) adj4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumo?r*)).ti,ab,kw,kf. (6360)

13 ((collagen* or elasti* or fibrillin or tendon* or ligament* or skin or cartilag* or fibrocartilag* or bone* or blood) adj4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumo?r*)).ti,ab,kw,kf. (124807)

- 14 or/1-13 (182400)
- 15 Neoplasm Recurrence, Local/ (126463)
- 16 Drug Resistance, Neoplasm/ (54479)
- 17 Recurrence/ (189172)
- 18 Treatment Failure/ (36136)

19 (refractor* or relaps* or repeat* or return* or restor* or renew* or resum* or recur* or reoccur* or re-occur* or reappear* or re-appear* or reemerge* or re-emerge* or rever* or resistan* or recrudescen* or recidivat* or deteriorat* or comeback or come-back or come back).ti,ab,kw,kf. (3793069)

20 ((treat* or surger* or surgical* or chemo* or therap* or immunotherap* or immuno-therap* or radiat* or drug* or agent*) and (resist* or fail* or unsuccessful* or nonrespon* or non-respon* or "no? respon*" or unrespon* or un-respon*)).ti,ab,kw,kf. (1250122)

- 21 (treatment-resistan* or drug-resistan*).ti,ab,kw,kf. (115904)
- 22 (pretreated or pre-treated or re-treat*).ti,ab,kw,kf. (76166)
- 23 (previous* adj3 treat*).ti,ab,kw,kf. (45169)
- 24 (lack* adj2 respon*).ti,ab,kw,kf. (6598)
- 25 or/15-24 (4474183)
- 26 14 and 25 (44392)
- 27 Pediatrics/ (55729)
- 28 Pediatric Emergency Medicine/ (355)
- 29 Neonatology/ (2895)
- 30 exp Child/ (1984023)
- 31 exp Infant/ (1176044)
- 32 Adolescent/ (2103055)
- 33 Young Adult/ (928432)

34 (p?ediatric* or child* or baby or babies or infant* or infancy or toddler* or neo nat* or neonat* or neonat* or newborn* or new-born* or new born* or newly born* or newly-born* or preschool* or pre-school* or schoolchild* or school-child* or school child* or school-age* or school age* or underage* or under-age* or boy* or girl* or kid* or preadolescen* or pre-adolescen* or preteen* or pre-teen* or pre teen* or teen or puberty or prepuberty or pre-puberty or pubescen* or pre-pubescen* or pre pubescen* or juvenil* or adoles* or youth*).ti,ab,kw,kf. (3101664)

35 (young adj2 (adult* or person* or people)).ti,ab,kw,kf. (141121)

36 or/27-35 (5391845)

37 26 and 36 (12001)

38 editorial/ or news/ or exp historical article/ or anecdotes as topic/ or comment/ or case report/ (4055415)

39 comment*.pt. (916114)

- 40 or/38-39 (4055415)
- 41 37 not 40 (9065)
- 42 exp animals/ not humans/ (4853981)
- 43 41 not 42 (8888)
- 44 limit 43 to yr="2000-Current" (6521)

Key:

/ = indexing term (Medical Subject Heading: MeSH)
exp = exploded indexing term (MeSH)
* = truncation
ti,ab,kw,kf = terms in either title, abstract, keyword or keyword heading word fields
pt = publication type field
adj3 = terms within three words of each other (any order).

Embase

via Ovid <u>http://ovidsp.ovid.com/</u> Date range searched: <1974 to 2021 June 29> Date searched: 30th June 2021 Records retrieved: 9648

Search Strategy:

- 1 exp rhabdomyosarcoma/ (18966)
- 2 *soft tissue tumor/ (6881)
- 3 *lipoma/ (8210)
- 4 *connective tissue tumor/ (652)
- 5 *muscle tumor/ (1853)
- 6 *myosarcoma/ (162)
- 7 rhabdomyosarcoma*.ti,ab,kw. (16023)

8 ((RMS or ERMS) and (embryonal or alveol* or botryoid* or pleomorphic or sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumo?r* or mass*)).ti,ab,kw. (4779)

9 ((soft or muscle* or muscular) adj3 tissue* adj4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumo?r* or malignan* or mass* or growth* or nodule* or nodal* or lump* or lesion* or sw?ll* or inflam*)).ti,ab,kw. (52284)

10 ((skelet* or musculoskelet* or striated or bone* or bony) adj3 (tissue* or muscle*) adj4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumo?r*)).ti,ab,kw. (6410)

11 (connectiv* adj4 (tissue* or fiber* or fibr*) adj4 (sarcoma* or myosarcoma* or cancer* or neoplas* or tumo?r*)).ti,ab,kw. (1922)

12 ((epithelia* or muscle* or nervous or adipose or elastic* or lymph*) adj3 (tissue* or fiber* or fibr*) adj4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumo?r*)).ti,ab,kw. (8179)

13 ((collagen* or elasti* or fibrillin or tendon* or ligament* or skin or cartilag* or fibrocartilag* or bone* or blood) adj4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumo?r*)).ti,ab,kw. (164773)

14 or/1-13 (250085)

- 15 tumor recurrence/ (60867)
- 16 cancer resistance/ (54015)
- 17 drug resistance/ (95351)
- 18 therapy resistance/ (3840)
- 19 recurrent disease/ (188110)
- 20 treatment failure/ (136901)

21 (refractor* or relaps* or repeat* or return* or restor* or renew* or resum* or recur* or reoccur* or re-occur* or reappear* or re-appear* or reemerge* or re-emerge* or rever* or resistan* or recrudescen* or recidivat* or deteriorat* or comeback or come-back or come back).ti,ab,kw. (4957837)

22 ((treat* or surger* or surgical* or chemo* or therap* or immunotherap* or immuno-therap* or radiat* or drug* or agent*) and (resist* or fail* or unsuccessful* or nonrespon* or non-respon* or "no? respon*" or unrespon* or un-respon*)).ti,ab,kw. (1839243)

- 23 (treatment-resistan* or drug-resistan*).ti,ab,kw. (159837)
- 24 (pretreated or pre-treated or re-treat*).ti,ab,kw. (103854)
- 25 (previous* adj3 treat*).ti,ab,kw. (79026)
- 26 (lack* adj2 respon*).ti,ab,kw. (10552)
- 27 or/15-26 (5940755)
- 28 14 and 27 (69247)
- 29 pediatrics/ (82216)
- 30 pediatric emergency medicine/ (924)
- 31 neonatology/ (5105)
- 32 exp child/ (2751764)
- 33 exp infant/ (1027996)
- 34 adolescent/ (1595156)
- 35 young adult/ (411795)

36 (p?ediatric* or child* or baby or babies or infant* or infancy or toddler* or neo nat* or neonat* or neonat* or newborn* or new-born* or new born* or newly born* or newly-born* or preschool* or pre-school* or schoolchild* or school-child* or school child* or school-age* or school age* or underage* or under-age* or boy* or girl* or kid* or preadolescen* or pre-adolescen* or preteen* or pre-teen* or pre teen* or teen or puberty or prepuberty or pre-puberty or pubescen* or pre-pubescen* or pre pubescen* or juvenil* or adoles* or youth*).ti,ab,kw. (3811923)

- 37 (young adj2 (adult* or person* or people)).ti,ab,kw. (187249)
- 38 or/29-37 (5394765)
- 39 28 and 38 (16537)
- 40 case report/ (2626769)
- 41 comment*.ti. (140797)
- 42 (comment or editorial or note).pt. (1550635)
- 43 or/40-42 (4163382)
- 44 39 not 43 (12201)
- 45 animal/ (1514559)
- 46 exp animal experiment/ (2711220)
- 47 nonhuman/ (6583291)
- 48 (rat or rats or mouse or mice or hamster or hamsters or animal or animals or dog or dogs or cat or cats or bovine or sheep).ti,ab,sh. (5942183)
- 49 or/45-48 (9353674)
- 50 exp human/ (22437659)
- 51 human experiment/ (548650)
- 52 50 or 51 (22439541)
- 53 49 not (49 and 52) (6740685)
- 54 44 not 53 (11642)
- 55 limit 54 to yr="2000-Current" (9648)

Key:

/ or .sh. = indexing term (Emtree Subject Heading)

- exp = exploded indexing term (Emtree)
- * = truncation
- ti,ab,kw = terms in either title, abstract or keyword fields
- adj3 = terms within three words of each other (any order).
- pt = publication type

Cochrane Central Register of Controlled Trials (CENTRAL)

via Wiley http://onlinelibrary.wiley.com/

Date range: Issue 6 of 12, June 2021 Date searched: 30th June 2021

Records retrieved: 1597

Search Strategy:

- #1 [mh Rhabdomyosarcoma] 88
- #2 [mh "Neoplasms, Connective AND Soft Tissue"[mj]] 1286
- #3 [mh "Neoplasms, Adipose Tissue"[mj]] 31
- #4 [mh "Neoplasms, Connective Tissue"[mj]] 389
- #5 [mh "Neoplasms, Muscle Tissue"[mj]] 524
- #6 [mh Myosarcoma] 90
- #7 rhabdomyosarcoma*:ti,ab,kw 287
- #8 ((RMS OR ERMS) AND (embryonal OR alveol* OR botryoid* OR pleomorphic OR sarcoma* OR myosarcoma* OR cancer* OR onco* OR neoplas* OR tum*r* OR mass*)):ti,ab,kw 210
- #9 ((soft OR muscle* OR muscular) NEAR/3 tissue* NEAR/4 (sarcoma* OR myosarcoma* OR cancer* OR onco* OR neoplas* OR tum*r* OR malignan* OR mass* OR growth* OR nodule* OR nodal* OR lump* OR lesion* OR sw?ll* OR inflam*)):ti,ab,kw 2010
- #10 ((skelet* OR musculoskelet* OR striated OR bone* OR bony) NEAR/3 (tissue* OR muscle*) NEAR/4 (sarcoma* OR myosarcoma* OR cancer* OR onco* OR neoplas* OR tum*r*)):ti,ab,kw 219
- #11 (connectiv* NEAR/4 (tissue* OR fiber* OR fibr*) NEAR/4 (sarcoma* OR myosarcoma* OR cancer* OR neoplas* OR tum*r*)):ti,ab,kw 80
- #12 ((epithelia* OR muscle* OR nervous OR adipose OR elastic* OR lymph*) NEAR/3 (tissue* OR fiber* OR fibr*) NEAR/4 (sarcoma* OR myosarcoma* OR cancer* OR onco* OR neoplas* OR tum*r*)):ti,ab,kw
- #13 ((collagen* OR elasti* OR fibrillin OR tendon* OR ligament* OR skin OR cartilag* OR fibrocartilag* OR bone* OR blood) NEAR/4 (sarcoma* OR myosarcoma* OR cancer* OR onco* OR neoplas* OR tum*r*)):ti,ab,kw
 18750
- #14 {OR #1-#13} 21742
- #15 [mh ^"Neoplasm Recurrence, Local"] 4368
- #16 [mh ^"Drug Resistance, Neoplasm"] 563
- #17 [mh ^Recurrence] 12316
- #18 [mh ^"Treatment Failure"] 3354
- #19 (refractor* OR relaps* OR repeat* OR return* OR restor* OR renew* OR resum* OR recur*OR reoccur* OR re NEXT occur* OR reappear* OR re NEXT appear* OR reemerge* OR re

NEXT emerge* OR rever* OR resistan* OR recrudescen* OR recidivat* OR deteriorat* OR comeback OR come NEXT back OR "come back"):ti,ab,kw 325614

- #20 ((treat* OR surger* OR surgical* OR chemo* OR therap* OR immunotherap* OR immuno NEXT therap* OR radiat* OR drug* OR agent*) AND (resist* OR fail* OR unsuccessful* OR nonrespon* OR non NEXT respon* OR "no? respon*" OR unrespon* OR un NEXT respon*)):ti,ab,kw 177531
- #21 (treatment NEXT resistan* OR drug NEXT resistan*):ti,ab,kw 13106
- #22 (pretreated OR pre NEXT treated OR re NEXT treat*):ti,ab,kw 5424
- #23 (previous* NEAR/3 treat*):ti,ab,kw 12796
- #24 (lack* NEAR/2 respon*):ti,ab,kw 668
- #25 {OR #15-#24} 421099
- #26 (#14 AND #25) 8924
- #27 [mh ^Pediatrics] 650
- #28 [mh ^"Pediatric Emergency Medicine"] 6
- #29 [mh ^Neonatology] 34
- #30 [mh Child] 57700
- #31 [mh Infant] 32953
- #32 [mh ^Adolescent] 106196
- #33 [mh ^"Young Adult"] 67918
- #34 (p*diatric* OR child* OR baby OR babies OR infant* OR infancy OR toddler* OR neo NEXT nat* OR neonat* OR newborn* OR new NEXT born* OR newly NEXT born* OR preschool* OR pre NEXT school* OR schoolchild* OR school NEXT child* OR school NEXT age* OR underage* OR under NEXT age* OR boy* OR girl* OR kid* OR preadolescen* OR pre NEXT adolescen* OR preteen* OR pre NEXT teen* OR teen OR puberty OR prepuberty OR pre NEXT puberty OR pubescen* OR pre NEXT pubescen* OR juvenil* OR adoles* OR youth*):ti,ab,kw
- #35 (young NEAR/2 (adult* OR person* OR people)):ti,ab,kw89334
- #36 {OR #27-#35} 402756
- #37 (#26 AND #36) with Publication Year from 2000 to 2021, in Trials 1597

Key:

MeSH descriptor = indexing term (MeSH)

[mj] = MeSH headings with a major focus

* = truncation or multiple additional characters within a word

ti,ab,kw = terms in either title or abstract or keyword fields

near/3 = terms within three words of each other (any order)

next = terms are next to each other.

Science Citation Index

via Web of Science, Clarivate Analytics https://clarivate.com/

Date range searched: 1900 – 29th June 2021

Date searched: 30th June 2021

Records retrieved: 6072

Search Strategy:

23 6,072

#20 NOT #21

Indexes=SCI-EXPANDED Timespan=2000-2021

22 7,005

#20 NOT #21

Indexes=SCI-EXPANDED Timespan=1900-2021

21 3,002,875

TI=(animal or animals or rat or rats or mouse or mice or rodent or rodents or porcine or murine or sh eep or lamb or lambs or ewe or ewes or pig or pigs or piglet or piglets or sow or sows or minipig or m inipigs or rabbit or rabbits or kitten or kittens or dog or dogs or puppy or puppies or monkey or mon keys or horse or horses or foal or foals or equine or calf or calves or cattle or heifer or heifers or ham ster or hamsters or chicken or chickens or livestock or alpaca* or llama*)

Indexes=SCI-EXPANDED Timespan=1900-2021

20 7,185

#16 AND #19

Indexes=SCI-EXPANDED Timespan=1900-2021

19 3,053,125

#17 OR #18

Indexes=SCI-EXPANDED Timespan=1900-2021

18 150,345

TS=(young NEAR/2 (adult* or person* or people))

Indexes=SCI-EXPANDED Timespan=1900-2021

17 2,972,630

TS=(pediatric* or paediatric* or child* or baby or babies or infant* or infancy or toddler* or "neo nat *" or neo-nat* or neonat* or newborn* or new-born* or "new born*" or "newly born*" or newlyborn* or preschool* or pre-school* or schoolchild* or school-child* or "school child*" or schoolage* or "school age*" or underage* or under-age* or boy* or girl* or kid* or preadolescen* or preadolescen* or preteen* or pre-teen* or "pre teen*" or teen or puberty or prepuberty or prepuberty or pubescen* or pre-pubescen* or "pre pubescen*" or juvenil* or adoles* or youth*)

Indexes=SCI-EXPANDED Timespan=1900-2021

16 45,469

#8 AND #15

Indexes=SCI-EXPANDED Timespan=1900-2021

15 5,733,689

#9 OR #10 OR #11 OR #12 OR #13 OR #14

Indexes=SCI-EXPANDED Timespan=1900-2021

14 10,468

TS=(lack* NEAR/2 respon*)

Indexes=SCI-EXPANDED Timespan=1900-2021

13 48,677

TS=(previous* NEAR/3 treat*) Indexes=SCI-EXPANDED Timespan=1900-2021

12 84,504

TS=(pretreated or pre-treated or re-treat*) Indexes=SCI-EXPANDED Timespan=1900-2021

11 133,775

TS=(treatment-resistan* or drug-resistan*)

Indexes=SCI-EXPANDED Timespan=1900-2021

10 1,387,596

TS=((treat* or surger* or surgical* or chemo* or therap* or immunotherap* or immunotherap* or radiat* or drug* or agent*) AND (resist* or fail* or unsuccessful* or nonrespon* or nonrespon* or "non respon*" or "not respon*" or unrespon* or un-respon*))

Indexes=SCI-EXPANDED Timespan=1900-2021

#9 5,155,247

TS=(refractor* or relaps* or repeat* or return* or restor* or renew* or resum* or recur* or reoccur * or re-occur* or reappear* or re-appear* or reemerge* or re-

emerge* or rever* or resistan* or recrudescen* or recidivat* or deteriorat* or comeback or comeback or "come back")

Indexes=SCI-EXPANDED Timespan=1900-2021

8 182,773

#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7

Indexes=SCI-EXPANDED Timespan=1900-2021

7 127,482

TS=((collagen* or elasti* or fibrillin or tendon* or ligament* or skin or cartilag* or fibrocartilag* or b one* or blood) NEAR/4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*))

Indexes=SCI-EXPANDED Timespan=1900-2021

#6 7,071

TS=((epithelia* or muscle* or nervous or adipose or elastic* or lymph*) NEAR/3 (tissue* or fiber* or fibr*) NEAR/4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*))

Indexes=SCI-EXPANDED Timespan=1900-2021

#5 1,217

TS=(connectiv* NEAR/4 (tissue* or fiber* or fibr*) NEAR/4 (sarcoma* or myosarcoma* or cancer* or neoplas* or tumor* or tumour*))

Indexes=SCI-EXPANDED Timespan=1900-2021

#4 4,726

TS=((skelet* or musculoskelet* or striated or bone* or bony) NEAR/3 (tissue* or muscle*) NEAR/4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*))

Indexes=SCI-EXPANDED Timespan=1900-2021

#3 38,344

TS=((soft or muscle* or muscular) NEAR/3 tissue* NEAR/4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour* or malignan* or mass* or growth* or nodule* or nodal* or lump* or lesion* or swell* or swollen or inflam*))

Indexes=SCI-EXPANDED Timespan=1900-2021

2 5,953

TS=((RMS or ERMS) AND (embryonal or alveol* or botryoid* or pleomorphic or sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour* or mass*))

Indexes=SCI-EXPANDED Timespan=1900-2021

#1 12,791

TS=(rhabdomyosarcoma*)

Indexes=SCI-EXPANDED Timespan=1900-2021

Key:

TS= terms in either title, abstract, author keywords, and keywords plus fields

NEAR/3 = terms within three words of each other (any order).

* = truncation

International HTA database

via https://database.inahta.org/

Date range: Inception – 29th June 2021 Date searched: 30th June 2021

Records retrieved: 440

Search Strategy:

28 #27 AND #26 440

27 * FROM 2000 TO 2021 16589

- 26 #25 AND #14 455
- 25 #24 OR #23 OR #22 OR #21 OR #20 OR #19 OR #18 OR #17 OR #16 OR #15 9081
- 24 (("lack of response"))[Title] OR (("lack of response"))[abs] 8
- 23 (("previously treated" or "treated previously"))[Title] OR (("previously treated" or "treated previously"))[abs] 44
- 22 ((pretreated or pre-treated or re-treat*))[Title] OR ((pretreated or pre-treated or retreat*))[abs] 6973
- 21 ((treatment-resistan* or drug-resistan*))[Title] OR ((treatment-resistan* or drug-resistan*))[abs] 6642
- 20 (((treat* or surger* or surgical* or chemo* or therap* or immunotherap* or immunotherap* or radiat* or drug* or agent*) and (resist* or fail* or unsuccessful* or nonrespon* or non-respon* or "non respon*" or "not respon*" or unrespon* or un-respon*)))[Title] OR (((treat* or surger* or surgical* or chemo* or therap* or immunotherap* or immunotherap* or radiat* or drug* or agent*) and (resist* or fail* or unsuccessful* or nonrespon* or non-respon* or "non respon*" or "not respon*" or unrespon* or un-respon*)))[abs] 2782
- 19 ((refractor* or relaps* or repeat* or return* or restor* or renew* or resum* or recur* or reoccur* or re-occur* or reappear* or re-appear* or reemerge* or re-emerge* or rever* or resistan* or recrudescen* or recidivat* or deteriorat* or comeback or come-back or "come back"))[Title] OR ((refractor* or relaps* or repeat* or return* or restor* or renew* or resum* or recur* or reoccur* or re-occur* or reappear* or re-appear* or re-appear* or reemerge* or re-emerge* or re-emerge* or recur* or recur* or recur* or recur* or reappear* or re-appear* or re-appear* or re-emerge* or re-emerge* or re-emerge* or recur* or recur* or reculescen* or recidivat* or deteriorat* or comeback or comeback or come-back or "come back"))[abs] 4008
- 18 "Treatment Failure"[mhe] 9
- 17 "Recurrence"[mhe] 135
- 16 "Drug Resistance, Neoplasm"[mhe] 4
- 15 "Neoplasm Recurrence, Local"[mhe] 67
- 14 #13 OR #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1 568
- 13 (((collagen* or elasti* or fibrillin or tendon* or ligament* or skin or cartilag* or fibrocartilag* or bone* or blood) and (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*)))[Title] OR (((collagen* or elasti* or fibrillin or tendon* or ligament* or skin or cartilag* or fibrocartilag* or bone* or blood) and (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*))][abs] 344
- 12 (((epithelia* or muscle* or nervous or adipose or elastic* or lymph*) and (tissue* or fiber* or fibr*) and (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*)))[Title] OR (((epithelia* or muscle* or nervous or adipose or elastic* or lymph*) and (tissue* or fiber* or fibr*) and (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*)))[abs] 57
- 11 ((connectiv* and (tissue* or fiber* or fibr*) and (sarcoma* or myosarcoma* or cancer* or neoplas* or tumor* or tumour*)))[Title] OR ((connectiv* and (tissue* or fiber* or fibr*) and (sarcoma* or myosarcoma* or cancer* or neoplas* or tumor* or tumour*)))[abs] 1

- 10 (((skelet* or musculoskelet* or striated or bone* or bony) and (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*)))[Title] OR (((skelet* or musculoskelet* or striated or bone* or bony) and (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*)))[abs] 140
- 9 (((soft or muscle* or muscular) and (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour* or malignan* or mass* or growth* or nodule* or nodal* or lump* or lesion* or swell* or swollen or inflam*)))[Title] OR (((soft or muscle* or muscular) and (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour* or malignan* or mass* or growth* or nodule* or nodal* or lump* or lesion* or swell* or swollen or inflam*))][abs] 143
- 8 (RMS or ERMS)[Title] OR (RMS or ERMS)[abs] 1
- 7 (rhabdomyosarcoma*)[Title] OR (rhabdomyosarcoma*)[abs] OR (rhabdomyosarcoma*)[Keywords] 1 PM
- 6 "Myosarcoma"[mhe] 0
- 5 "Neoplasms, Muscle Tissue"[mhe] 44
- 4 "Neoplasms, Connective Tissue"[mhe] 28
- 3 "Neoplasms, Adipose Tissue"[mhe] 0
- 2 "Neoplasms, Connective and Soft Tissue"[mhe] 104
- 1 "Rhabdomyosarcoma"[mhe] 0

Key:

[mh] = indexing term: Medical Subject Heading (MeSH) [mhe] exploded MeSH heading [Keywords] = search of keywords field [abs] = search of abstract field [Title] = search of title field * = truncation

Cochrane Database of Systematic Reviews (CDSR)

via Wiley http://onlinelibrary.wiley.com/

Date range: Issue 6 of 12, June 2021 Date searched: 30th June 2021

Records retrieved: 54

Search Strategy:

#1	[mh Rhabdomyosarcoma]	88	

- #2 [mh "Neoplasms, Connective AND Soft Tissue"[mj]] 1286
- #3 [mh "Neoplasms, Adipose Tissue"[mj]] 31
- #4 [mh "Neoplasms, Connective Tissue"[mj]] 389

#5 [mh "Neoplasms, Muscle Tissue"[mj]] 524

#6 [mh Myosarcoma] 90

#7 rhabdomyosarcoma*:ti,ab,kw 287

#8 ((RMS OR ERMS) AND (embryonal OR alveol* OR botryoid* OR pleomorphic OR sarcoma* OR myosarcoma* OR cancer* OR onco* OR neoplas* OR tum*r* OR mass*)):ti,ab,kw 210

#9 ((soft OR muscle* OR muscular) NEAR/3 tissue* NEAR/4 (sarcoma* OR myosarcoma* OR cancer* OR onco* OR neoplas* OR tum*r* OR malignan* OR mass* OR growth* OR nodule* OR nodal* OR lump* OR lesion* OR sw?ll* OR inflam*)):ti,ab,kw 2010

#10 ((skelet* OR musculoskelet* OR striated OR bone* OR bony) NEAR/3 (tissue* OR muscle*)
 NEAR/4 (sarcoma* OR myosarcoma* OR cancer* OR onco* OR neoplas* OR tum*r*)):ti,ab,kw 219

#11 (connectiv* NEAR/4 (tissue* OR fiber* OR fibr*) NEAR/4 (sarcoma* OR myosarcoma* OR cancer* OR neoplas* OR tum*r*)):ti,ab,kw 80

#12((epithelia* OR muscle* OR nervous OR adipose OR elastic* OR lymph*) NEAR/3 (tissue* OR
fiber* OR fibr*) NEAR/4 (sarcoma* OR myosarcoma* OR cancer* OR onco* OR neoplas* OR
tum*r*)):ti,ab,kw201

#13 ((collagen* OR elasti* OR fibrillin OR tendon* OR ligament* OR skin OR cartilag* OR fibrocartilag* OR bone* OR blood) NEAR/4 (sarcoma* OR myosarcoma* OR cancer* OR onco* OR neoplas* OR tum*r*)):ti,ab,kw 18750

#14 {OR #1-#13} 21742

#15 [mh ^"Neoplasm Recurrence, Local"] 4368

#16 [mh ^"Drug Resistance, Neoplasm"] 563

#17 [mh ^Recurrence] 12316

#18 [mh ^"Treatment Failure"] 3354

#19 (refractor* OR relaps* OR repeat* OR return* OR restor* OR renew* OR resum* OR recur* OR reoccur* OR re NEXT occur* OR reappear* OR re NEXT appear* OR reemerge* OR re NEXT emerge* OR rever* OR resistan* OR recrudescen* OR recidivat* OR deteriorat* OR comeback OR come NEXT back OR "come back"):ti,ab,kw 325614

#20 ((treat* OR surger* OR surgical* OR chemo* OR therap* OR immunotherap* OR immuno NEXT therap* OR radiat* OR drug* OR agent*) AND (resist* OR fail* OR unsuccessful* OR nonrespon* OR non NEXT respon* OR "no? respon*" OR unrespon* OR un NEXT respon*)):ti,ab,kw 177531

#21 (treatment NEXT resistan* OR drug NEXT resistan*):ti,ab,kw 13106

#22 (pretreated OR pre NEXT treated OR re NEXT treat*):ti,ab,kw 5424

#23 (previous* NEAR/3 treat*):ti,ab,kw 12796

#24 (lack* NEAR/2 respon*):ti,ab,kw 668

#25 {OR #15-#24} 421099

#26 (#14 AND #25) 8924

#27 [mh ^Pediatrics] 650

- #28 [mh ^"Pediatric Emergency Medicine"] 6
- #29 [mh ^Neonatology] 34
- #30 [mh Child] 57700
- #31 [mh Infant] 32953
- #32 [mh ^Adolescent] 106196
- #33 [mh ^"Young Adult"] 67918

#34 (p*diatric* OR child* OR baby OR babies OR infant* OR infancy OR toddler* OR neo NEXT nat* OR neonat* OR newborn* OR new NEXT born* OR newly NEXT born* OR preschool* OR pre NEXT school* OR schoolchild* OR school NEXT child* OR school NEXT age* OR underage* OR under NEXT age* OR boy* OR girl* OR kid* OR preadolescen* OR pre NEXT adolescen* OR preteen* OR pre NEXT teen* OR teen OR puberty OR prepuberty OR pre NEXT puberty OR pubescen* OR pre NEXT pubescen* OR juvenil* OR adoles* OR youth*):ti,ab,kw 357205

- #35 (young NEAR/2 (adult* OR person* OR people)):ti,ab,kw89334
- #36 {OR #27-#35} 402756
- #37 (#26 AND #36) with Cochrane Library publication date from Jan 2000 to Jun 2021 54

Key:

MeSH descriptor = subject heading (MeSH heading) [mj] = MeSH headings with a major focus * = truncation ti,ab,kw = terms in title, abstract or keyword fields near/3 = terms within three words of each other (any order) next = terms are next to each other

Database of Abstracts of Reviews of Effects (DARE)

via https://www.crd.york.ac.uk/CRDWeb/

Date range searched: Inception to 31st March 2015.

Date searched: 30th June 2021

Records retrieved: 127

Search Strategy:

- 1 MeSH DESCRIPTOR Rhabdomyosarcoma EXPLODE ALL TREES IN DARE 1
- 2 MeSH DESCRIPTOR Neoplasms, Connective and Soft Tissue EXPLODE ALL TREES IN DARE 132
- 3 MeSH DESCRIPTOR Myosarcoma EXPLODE ALL TREES IN DARE 1
- 4 (rhabdomyosarcoma*) IN DARE 8

- 5 ((RMS or ERMS) and (embryonal or alveol* or botryoid* or pleomorphic or sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour* or mass*)) IN DARE
 1
- 6 ((soft or muscle* or muscular) NEAR3 tissue* NEAR4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour* or malignan* or mass* or growth* or nodule* or nodal* or lump* or lesion* or swell* or swoll* or inflam*)) IN DARE 36
- 7 ((skelet* or musculoskelet* or striated or bone* or bony) NEAR3 (tissue* or muscle*) NEAR4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*)) IN
 DARE 1
- 8 (connectiv* NEAR4 (tissue* or fiber* or fibr*) NEAR4 (sarcoma* or myosarcoma* or cancer* or neoplas* or tumor* or tumour*)) IN DARE 0
- 9 ((epithelia* or muscle* or nervous or adipose or elastic* or lymph*) NEAR3 (tissue* or fiber* or fibr*) NEAR4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*)) IN DARE
 3
- 10 ((collagen* or elasti* or fibrillin or tendon* or ligament* or skin or cartilag* or fibrocartilag* or bone* or blood) NEAR4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*)) IN DARE 430
- 11 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 556
- 12 MeSH DESCRIPTOR Neoplasm Recurrence, Local EXPLODE ALL TREES IN DARE 440
- 13 MeSH DESCRIPTOR Drug Resistance, Neoplasm IN DARE 28
- 14 MeSH DESCRIPTOR Recurrence EXPLODE ALL TREES IN DARE 713
- 15 MeSH DESCRIPTOR Treatment Failure IN DARE 186
- 16 (refractor* or relaps* or repeat* or return* or restor* or renew* or resum* or recur* or reoccur* or re-occur* or reappear* or re-appear* or reemerge* or re-emerge* or rever* or resistan* or recrudescen* or recidivat* or deteriorat* or comeback or come-back or come back) IN DARE 6667
- 17 (treatment-resistan* or drug-resistan*) IN DARE 373
- 18 (pretreated or pre-treated or re-treat*) IN DARE95
- 19 (previous* NEAR3 treat*) IN DARE 221
- 20 (lack* NEAR2 respon*) IN DARE 11
- 21 #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 6953
- 22 #11 AND #21 136
- 23 (#11 AND #21) IN DARE FROM 2000 TO 2015 127

Key:

MeSH DESCRIPTOR = indexing term: Medical Subject Heading (MeSH)

EXPLODE ALL TREES = exploded indexing term (MeSH)

* = truncation

NEAR3 = terms within three words of each other (only in the order specified).

International Prospective Register of Systematic Reviews (PROSPERO)

via <u>https://www.crd.york.ac.uk/prospero/</u> Date range: Inception – 29th June 2021 Date searched: 30th June 2021

Records retrieved: 185

Search Strategy:

- #1 MeSH DESCRIPTOR Rhabdomyosarcoma EXPLODE ALL TREES 9
- #2 MeSH DESCRIPTOR Neoplasms, Connective AND Soft Tissue EXPLODE ALL TREES 219
- #3 MeSH DESCRIPTOR Myosarcoma EXPLODE ALL TREES 9
- #4 (rhabdomyosarcoma*):TI,KW 12
- #5 ((soft or muscle* or muscular) ADJ3 tissue* ADJ4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour* or malignan* or mass* or growth* or nodule* or nodal* or lump* or lesion* or swell* or swoll* or inflam*)):TI,KW
- #6 ((skelet* or musculoskelet* or striated or bone* or bony) ADJ3 (tissue* or muscle*) ADJ4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*)):TI,KW
 3
- #7 (connectiv* ADJ4 (tissue* or fiber* or fibr*) ADJ4 (sarcoma* or myosarcoma* or cancer* or neoplas* or tumor* or tumour*)):TI,KW 0
- #8 ((epithelia* or muscle* or nervous or adipose or elastic* or lymph*) ADJ3 (tissue* or fiber* or fibr*) ADJ4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*)):TI,KW 1
- #9 ((collagen* or elasti* or fibrillin or tendon* or ligament* or skin or cartilag* or fibrocartilag* or bone* or blood) ADJ4 (sarcoma* or myosarcoma* or cancer* or onco* or neoplas* or tumor* or tumour*)):TI,KW 182
- #10 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 422
- #11 MeSH DESCRIPTOR Neoplasm Recurrence, Local EXPLODE ALL TREES 202
- #12 MeSH DESCRIPTOR Drug Resistance, Neoplasm EXPLODE ALL TREES 10
- #13 MeSH DESCRIPTOR Recurrence EXPLODE ALL TREES 294
- #14 MeSH DESCRIPTOR Treatment Failure EXPLODE ALL TREES 50
- #15 (refractor* or relaps* or repeat* or return* or restor* or renew* or resum* or recur* or reoccur* or re-occur* or reappear* or re-appear* or reemerge* or re-emerge* or rever* or resistan* or recrudescen* or recidivat* or deteriorat* or comeback or come-back or come back) 28708
- #16 (treatment-resistan* or drug-resistan*) 1081
- #17 (pretreated or pre-treated or re-treat*) 107

- #18 (previous* ADJ3 treat*) 1142
- #19 (lack* ADJ2 respon*) 47
- #20 #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 29440
- #21 #10 AND #20 185

Key:

MeSH DESCRIPTOR = indexing term: Medical Subject Heading (MeSH) EXPLODE ALL TREES = exploded indexing term (MeSH) * = truncation adj3 = terms within three words of each other (order specified). :TI,KW = terms in either title or keyword fields

ClinicalTrials.gov

via <u>https://clinicaltrials.gov/</u> Date searched: 30th June 2021 Records retrieved: 302

Search Strategy:

Condition or Disease: (ERMS OR rhabdomyosarcoma)

European Union Clinical Trials Register

via www.clinicaltrialsregister.eu/ctr-search/search

Date searched: 30th June 2021

Records retrieved: 39

Search Strategy:

Advanced Search: (ERMS OR rhabdomyosarcoma)

Select Age Range: Adolescent, Children, Infant and Toddler, Newborn, Preterm New Born Infants, Under 18

WHO ICTRP

via https://ictrptest.azurewebsites.net/Default.aspx

Date searched: 30th June 2021

Records retrieved: 292 records for 195 trials

Search Strategy: Condition: (ERMS OR rhabdomyosarcoma) Recruitment Status: All

ISRCTN

via <u>https://www.isrctn.com/editAdvancedSearch</u> Date searched: 30th June 2021 Records retrieved: 7

Search Strategy:

Text Search: (ERMS OR rhabdomyosarcoma)

Appendix 2

REFORMS Full Text Data Extraction Form

General Information

Q1. Person performing data extraction

- Lucy Beresford (1)
- Gemma Bryan (2)
- Connor Evans (3)
- Jess Morgan (4)
- Bob Phillips (5)

Q2. Study Author, Year

Q3. Conference Abstract/Full Text?

- Full Text (1)
- Conference Abstract (2)
- Other (3) ____

Q4. Study Title

Q5. Corresponding Author's Email Address

Q6. Language

- English (1)
- Other (2) ____

Q7. Country/countries in which research was performed

- United Kingdom (1)
- o USA (2)
- Canada (3)
- France (4)
- Germany (5)
- Other (6) _____

Q8. Funding

- Funded (provide details of funder below) (6) ______
- No Funding (4)
- Not Reported (5)

Study Information

Q9. Stated aim of the study

Q10. Phase

- Phase 1 (1)
- Phase 2 (2)
- Phase 1/2 (3)
- Other (4) _
- Not Reported (5)

Q11. Single centre or multicentre

- Single centre (1)
- Multi-centre (2)
- Not reported (3)
- Other (4) ___

Q12. Type of Study

- Single-arm trial (1)
- Multiple-arm trial (11)
- Pilot Study (2)
- First-in-child (3)
- First-in-human (4)
- Randomised trial (5)
- Not Reported (7)

Q13. Patient Enrollment Dates

When was the study recruiting patients. In this example: "From November 1999 to June 2002, thirty-five patients were included and treated in the study", the patient enrollment dates would be November 1999 to June 2002

- Enrollment Dates (1) ______
- Not Reported (2) ______

Q14. Inclusion Criteria

- Relapsed Disease (1)
- Refractory Disease (2)
- Rhabdomyosarcoma only (3)
- Soft-tissue sarcomas only (4)
- All solid tumours (5)
- Ages included (6)
- Other important criteria (7) ______

Q15. Important Exclusion Criteria

e.g. are particular subgroups of Rhabdomyosarcoma, or patients with previous exposure to a particular treatment excluded?

Intervention Used* Q16. Treatment Name

Q17. Method of administration

Q18. Dose

_

Q19. Frequency of administration

Q20. Duration of administration

Q21. Maximum Number of Cycles

Comparator

Q22. Is there a comparator?

- Yes (1)
- No (2)

Patient Demographics:

Q23. Are the patient demographics rhabdomyosarcoma specific?

- Yes (1)
- No (2)
- Other (3)_____

Q24. Number of Participants*

- Intervention Arm (Total) ______
- Intervention Arm (RMS) ______

Q25. Age*

- Median (1) ______
- Range (2) _____
- Other (3)

Q26. Sex*

- Male (1) _____ •
- Female (2) _____
- Not Reported (3) ______

Q27. Ethnicity*

- White (1) ____
- Black or African American (2)
- Asian (3) _____

- Other (4) ____
- _____ Unknown (5)
- Not Reported (6) •

Patient's Disease Characteristics

Q28. Are the patient disease characteristics rhabdomyosarcoma-specific?

- Yes (1)
- No (2)
- Other (3)_____

Q29. Histopathology*

- Rhabdomyosarcoma (1) ______
- Alveolar RMS (2) ______
- Embryonal RMS (3) •
- •
- Botryoid RMS (4) _____ Pleomorphic RMS (5) _____ •
- Not Otherwise Specified (6) _____ •
- Not Classified (7) ______ •
- Not Reported (8) ______

Q30. Fusion Status*

- PAX-FOXO1 fusion positive (1) ______
- PAX-FOXO1 fusion negative (2) ______
- Other (3) _____
- Not Reported (4) _____

Q31. Number Relapsed/Refractory*

- Neither Relapsed or Refractory (1) _____ •
- First Relapse (2) ______
 Second Relapse (3) ______
- Refractory (4) ______ Not Reported (5) ______

Other (6) _____ •

Q32. Number of Prior Lines of Systemic Treatment*

- 0(1)_____ • 1 (2) _____
- 2 (3)
- >2 (4) _____
- Other (5)

Q33. Previous Treatments Received*

- Conventional chemotherapy (1) _
- High-dose chemotherapy with stem-cell rescue (2) _____ •
- Radiotherapy (3)
- Surgical Resection (4)
- Other (5)
- Not Reported (6) _____

Q34. Extent of Disease at Diagnosis

- Localised (1) •
- Regional (Nodal Involvement) (2) •
- Metastatic (3) ______
- Other (4) _____
- Not reported (5) ______

Q35. Extent of Disease at Relapse*

If not made clear, assume that the **baseline** characteristics mean extent of disease at relapse

- Localised (1) _____
- Regional (Nodal Involvement) (2) ______
- Metastatic (3) ______ •
- Other (4) _____
- Not reported (5) ______ •

Q36. Site of Primary RMS*

Please only provide details of patients with favourable/unfavourable location if not reported by tumour type

- Head and Neck (1) ______ •
- Limbs (2) _____
- Thorax (3) ______
- Abdomen (4) _____ •
- Orbit (5)
- Prostate/bladder (6) ______ •
- Parameningeal (7) _____
- Genitourinary (non-bladder/prostate) (8) •
- Other (9) _____ •
- _____ Not Reported (10) _____ •
- Favourable Site (11) ______ •
- Unfavourable Site (12) ______ •

Q37. Time from Initial Diagnosis*

- Median (1) ______
- Range (2) _____
- Other (3)
- Not Reported (4) _______

Q38. Time from Relapse/Progression to First Study Treatment*

- Median (1) _____
- Range (2) ______
- Other (3) _____
- Not Reported (4) _______

Q39. Details of any refusal to consent/withdrawal data/participants excluded

_

Q40. Other population data provided by paper

Adverse Events Q41. Number of Patients Evaluable for Toxicity* _____

Q42. Number of adverse events*

- Dose-limiting toxicities (1) ______
- Grade 3 toxicities (2) ______
 Grade 4 toxicities (3) ______

- Other (7)

Q43. Most Common Adverse Events

Outcomes

Q44. Number of Patients Evaluable for Response*

- N (1) •
- Not Reported (2) •

Q45. Length of Follow-Up*

- Length of Follow-up (1) _____

Q46. Overall Response Rate*

- Percentage (1)
- 95% Confidence Interval (2)
- Other (3) _____

Q47. Best Tumour Response*

- Number Complete Responses (1) ______
- Number Partial Responses (2) ______

- •
- Number Stable Disease (3)

 Number Progressive Disease (4)

 •
- Number Not Assessable (5) ______
- Not Reported (6) _______

• Other (7) _____

Q48. Event Free Survival*

- Follow-up point (1) _____
- Proportion EFS (2) ______ • Median (3) _____

- Range (4) _____
- Other (5)
- Not Reported (6) •

Q49. Overall Survival*

- Follow-up point (1) ______
- Proportion EFS (2) ______
- Median (3) _____
- Range (4) ______
- Other (5)
- _____ Not Reported (6) ______

Q50. Hazard Ratio*

- Follow-up point (1) ______

Q51. Time to Progression*

- Ensure unit of time is included
 - Median (1) _____
 - 95% Confidence Interval (2) _____
 - Other (3) _____
 - Not Reported (4) ______

Q52. Length of Survival*

Ensure unit of time is included

- Median (1) _____
- Median (1) ______ 95% Confidence Interval (2) ______ •
- Other (3) ____
- Not Reported (4) _____

Q53. Other outcomes reported in the study

REFORMS Clinical Trials Registry Data Extraction Form

Q1. Person carrying out data extraction

- Lucy Beresford
- Connor Evans
- Jess Morgan
- Gemma Bryan
- Bob Phillips •
- Other

Q2. Trial Registry

- Clinical Trials.gov •
- WHO ICTRP
- EU Trials
- IRSCTN

• Other _____

Q3. Title

Q4. Registration Number

Q5. Recruitment Status

- Not Yet Recruiting
- Recruiting
- Enrolling by invitation
- Active, not recruiting
- Suspended
- Terminated
- Completed
- Withdrawn
- Unknown
- Other _____

Q6. First Posted

DD/MM/YYYY

Q7. Last Updated Posted

DD/MM/YYYY

Q8. Phase

- Early Phase I
- Phase I
- Phase II
- Phase II/III
- Phase 3
- Not Applicable
- Not Reported

Q9. Is the number of participants an estimated or actual enrollment.

- Estimated Enrollment
- Actual Enrollment
- Other ____

Q10. Number of patients in the estimated/actual enrollment

Q11. Study Start Date (Estimated or Actual)

DD/MM/YYYY

Q12. Estimated Primary Completion Date

DD/MM/YYYY

Q13. Estimated Study Completion Date

• DD/MM/YYYY

Q14. Intervention/Treatment

Q15. Is there a comparator?

- Yes
- No

Q16. If so, what is the comparator?

Q17. Outcomes to be collected

- Response rates
- Adverse events
- Overall survival
- Progression free survival
- Maximum tolerated dose
- Dose limiting toxicitiy
- Other _

Q18. Conditions being studied

- Relapsed
- Refractory
- Rhabdomyosarcoma only
- Soft-tissue sarcomas only
- All solid tumours
- Children
- Young Adults
- All Ages
- Not Reported
- Other _

Q17. Ages eligible for study

Q18. Study Sponsor

- Pharmaceutical Company
- Academic
- Other _

Q19. Responsible Party

Q20. Principle Invesigator

Include email address if provided

Q21. Publication Information

Appendix 3

Table of studies excluded at full-text stage and reasons for exclusion.

Author, Year	Title	Reason for Exclusion
Abdul Razak, 2016	First-in-class, first-in-human phase I study of selinexor, a selective inhibitor of nuclear export, in patients with advanced solid tumors	Wrong population (adults)
Adamson, 2001	A phase I trial and pharmacokinetic study of 9-cis-retinoic acid (ALRT1057) in pediatric patients with refractory cancer: A Joint Pediatric Oncology Branch, National Cancer Institute, and Children's Cancer Group Study	No separable RMS data (no reply to email)
Agarwal, 2018	Pediatric Robotic Prostatectomy and Pelvic Lymphadenectomy for Embryonal Rhabdomyosarcoma	Wrong study design (case study)
Agulnik, 2017	A phase II study of tivozanib in patients with metastatic and nonresectable soft-tissue sarcomas	Wrong population (adults)
Akshintala, 2015	Phase 1 trial and pharmacokinetic study of the oral platinum analog satraplatin in children and young adults with refractory solid tumors including brain tumors	Wrong population (no RMS)
Andre, 2011	Pilot study of a pediatric metronomic 4-drug regimen	Wrong population (adults)
Anonymous, 2011	Erratum: Randomized phase II window trial of two schedules of urinotecan with vincristine in patients with first relapse or progression of rhabdomyosarcoma: A report from the children's oncology group (Journal of Clinical Oncology (2010) 28 (4658-4663))	Erratum
Anonymous, 2015	ERRATA. Randomized Phase II Window Trial of Two Schedules of Irinotecan With Vincristine in Patients With First Relapse or Progression of Rhabdomyosarcoma: A Report From the Children's Oncology Group	Errata
Aubry, 2016	Prospective 1-year follow-up pilot study of CT-guided microwave ablation in the treatment of bone and soft-tissue malignant tumours	Wrong population (adults)
Azinovic, 2003	Intraoperative radiotherapy electron boost followed by moderate doses of external beam radiotherapy in resected soft-tissue sarcoma of the extremities	Wrong study duration (before 2000)
Bagatell, 2010	Pharmacokinetically Guided Phase 1 Trial of the IGF-1 Receptor Antagonist RG1507 in Children with Recurrent or Refractory Solid Tumors	No separable RMS data (no reply to email)
Bauer, 2013	Escalating topotecan in combination with treosulfan has acceptable toxicity in advanced pediatric sarcomas	Wrong study design (not a trial)
Bauer, 2002	Gemcitabine-containing chemotherapy in the treatment of patients with advanced soft tissue sarcoma. [German] Gemcitabinhaltige chemotherapie in der behandlung von patienten mit fortgeschrittenen weichteilsarkomen	Wrong population (no RMS) Wrong study design (retrospective)
Bautista, 2015	Patients in pediatric phase I and early phase II clinical oncology trials at Gustave Roussy: a 13-year center experience	Wrong study design (not a trial)

Benesch, 2008	Bevacizumab for refractory solid tumors in pediatric patients	Wrong population (no RMS)
Benesch, 2008	Compassionate use of bevacizumab (Avastin((R))) in children and young adults with refractory or recurrent solid tumors	Wrong study design (retrospective)
Bernbeck, 2007	Serial intense chemotherapy combining topotecan, etoposide, carboplatin and cyclophosphamide (TECC) followed by autologous hematopoietic stem cell support in patients with high risk soft tissue sarcoma (STS)	Wrong study design (retrospective)
Bharathy, 2018	The HDAC3-SMARCA4-miR-27a axis promotes expression of the PAX3:FOXO1 fusion oncogene in rhabdomyosarcoma	Wrong population (animal/cell lines)
Bisogno, 2018	Addition of dose-intensified doxorubicin to standard chemotherapy for rhabdomyosarcoma (EpSSG RMS 2005): a multicentre, open-label, randomised controlled, phase 3 trial	Wrong population (previously untreated)
Blakely, 2015	Surgical palliation for malignant disease requiring locoregional control	Wrong population (adults)
		Wrong study design (retrospective)
Blay, 2008	Phase I combination study of trabectedin and doxorubicin in patients with soft-tissue sarcoma	Wrong population (adults)
Bramwell, 2002	Safety and efficacy of the multidrug-resistance inhibitor biricodar (VX-710) with concurrent doxorubicin in patients with anthracycline-resistant advanced soft tissue sarcoma	Wrong population (adults)
Brandts, 2012	Adjuvant therapy for resectable high-risk soft tissue sarcoma:feasibility and efficacy of a sandwich chemoradiotherapy strategy	Wrong population (adults)
Brandts, 2012	Adjuvant therapy for resectable high-risk soft tissue sarcoma: feasibility and efficacy of a sandwich chemoradiotherapy strategy	Wrong population (adults)
Brennan, 2014	Phase I dose escalation and pharmacokinetic study of oral gefitinib and irinotecan in children with refractory solid tumors	Wrong population (no RMS)
Briusov, 2005	[Surgical and combined treatment of soft tissue sarcomas of extremities]	Wrong population (adults)
Brodowicz, 2018	Efficacy and safety of regorafenib compared to placebo and to post-cross-over regorafenib in advanced non-adipocytic soft tissue sarcoma	Wrong population (adults)
Bukowinski, 2021	A phase 1 study of entinostat in children and adolescents with recurrent or refractory solid tumors, including CNS tumors: Trial ADVL1513, Pediatric Early Phase-Clinical Trial Network (PEP-CTN)	No separable RMS data (no reply to email)
Buszek, 2021	Disease Control and Patterns of Failure After Proton Beam Therapy for Rhabdomyosarcoma	Wrong population (previously untreated)
Buwalda, 2003	A novel local treatment strategy for advanced stage head and neck rhabdomyosarcomas in children: results of the AMORE protocol	Wrong population (previously untreated)
Buwalda, 2004	The AMORE protocol as salvage treatment for non-orbital head an neck rhabdomyosarcoma in children	Duplicate
	•	•

Buyukkapu, 2019	Vincristine, irinotecan, and temozolomide treatment for refractory/relapsed pediatric solid tumors: A single center experience	Wrong study design (not a trial)
Carbo-Laso, 2017	Intraoperative radiotherapy for extremity soft-tissue sarcomas: can long-term local control be achieved?	Wrong population (adults) Not separated and no reply to email
Cartei, 2003	Dose finding of ifosfamide administered with a chronic two- week continuous infusion	Wrong population (adults)
Casey, 2019	Worse Outcomes for Head and Neck Rhabdomyosarcoma Secondary to Reduced-Dose Cyclophosphamide	Wrong population (previously untreated)
Chargari, 2017	Brachytherapy Combined With Surgery for Conservative Treatment of Children With Bladder Neck and/or Prostate Rhabdomyosarcoma	Wrong study design (not a trial)
Chawla, 2012	Phase II study of the mammalian target of rapamycin inhibitor ridaforolimus in patients with advanced bone and soft tissue sarcomas	Wrong population (adults) (no RMS)
Chen, 2002	[Continuous-infusion high dose ifosfamide as salvage treatment for pre-treated soft tissue sarcoma]	No separable RMS data (no reply to email)
Chu, 2010	Phase I and pharmacokinetic study of sequential paclitaxel and trabectedin every 2 weeks in patients with advanced solid tumors	Wrong population (adults)
Chugh, 2015	Doxorubicin plus the IGF-1R antibody cixutumumab in soft tissue sarcoma: a phase I study using the TITE-CRM model	Wrong population (adults) (no RMS)
Chuk, 2012	A phase I trial and pharmacokinetic study of a 24-hour infusion of trabectedin (Yondelis (R), ET-743) in children and adolescents with relapsed or refractory solid tumors	Wrong population (no RMS)
Coens, 2015	Health-related quality-of-life results from PALETTE: A randomized, double-blind, phase 3 trial of pazopanib versus placebo in patients with soft tissue sarcoma whose disease has progressed during or after prior chemotherapy-a European Organization for research and treatment of cancer soft tissue and bone sarcoma group global network study (EORTC 62072)	Wrong population (adults)
Combs, 2012	Treatment of pediatric patients and young adults with particle therapy at the Heidelberg Ion Therapy Center (HIT): establishment of workflow and initial clinical data	Wrong study design (retrospective)
Cortesi, 2017	Adjuvant radiotherapy with brachytherapy boost in soft tissue sarcomas	Wrong study design (retrospective)
Cosetti, 2002	Irinotecan for pediatric solid tumors: the Memorial Sloan- Kettering experience	Wrong study design (not a trial)
Coulter, 2013	Valproic acid reduces the tolerability of temsirolimus in children and adolescents with solid tumors	Wrong population (no RMS)
Dagher, 2002	Pilot trial of tumor-specific peptide vaccination and continuous infusion interleukin-2 in patients with recurrent Ewing sarcoma and alveolar rhabdomyosarcoma: an inter- institute NIH study	Wrong study duration (before 2000)

De Sio, 2006	Erratum: Temozolomide in resistant or relapsed pediatric solid tumors (Pediatric Blood and Cancer (2006) 47 (30-36))	Erratum
Di Filippo, 2009	Hyperthermic isolated perfusion with tumor necrosis factor- alpha and doxorubicin for the treatment of limb-threatening soft tissue sarcoma: the experience of the Italian Society of Integrated Locoregional Treatment in Oncology (SITILO)	Wrong population (adults)
DuBois, 2018	The use of neoadjuvant larotrectinib in the management of children with locally advanced TRK fusion sarcomas	Wrong population (no RMS)
Eckert, 2018	Radiotherapy and hyperthermia with curative intent in recurrent high risk soft tissue sarcomas	Wrong population (adults)
Ermoian, 2017	45 Gy is not sufficient radiotherapy dose for Group III orbital embryonal rhabdomyosarcoma after less than complete response to 12 weeks of ARST0331 chemotherapy: A report from the Soft Tissue Sarcoma Committee of the Children's Oncology Group	Wrong population (previously untreated)
Eskens, 2009	Phase I dose escalation study of telatinib, a tyrosine kinase inhibitor of vascular endothelial growth factor receptor 2 and 3, platelet-derived growth factor receptor beta, and c-Kit, in patients with advanced or metastatic solid tumors	Wrong population (adults)
Fakhrai, 2010	Intensified adjuvant IFADIC chemotherapy in combination with radiotherapy versus radiotherapy alone for soft tissue sarcoma: long-term follow-up of a prospective randomized feasibility trial	Wrong population (adults)
Falchook, 2014	Targeting hypoxia-inducible factor-1 α (HIF-1 α) in combination with antiangiogenic therapy: a phase I trial of bortezomib plus bevacizumab	Wrong population (adults)
Felgenhauer, 2000	Very intensive, short-term chemotherapy for children and adolescents with metastatic sarcomas	Wrong population (previously untreated)
		Wrong study duration (before 2000)
Fouladi, 2010	Pediatric phase I trial and pharmacokinetic study of vorinostat: A children's oncology group phase I consortium report	No separable RMS data (email reply but no additional info given)
Fouladi, 2014	A phase I trial of MK-2206 in children with refractory malignancies: A Children's Oncology Group study	No separable RMS data (email reply but no additional info given)
Garcia-del-Muro, 2011	Randomized phase II study comparing gemcitabine plus dacarbazine versus dacarbazine alone in patients with previously treated soft tissue sarcoma: a Spanish Group for Research on Sarcomas study	Wrong population (adults) (no RMS)
Garcia del Muro, 2018	Phase II trial of ifosfamide in combination with the VEGFR inhibitor sorafenib in advanced soft tissue sarcoma: a Spanish group for research on sarcomas (GEIS) study	Wrong population (adults)
Geller, 2009	Phase I Study of Paclitaxel With Standard Dose Ifosfamide in Children With Refractory Solid Tumors: A Pediatric Oncology Group Study (POG 9376)	Wrong population (no RMS)
Geller, 2018	A study of axitinib, a VEGF receptor tyrosine kinase inhibitor, in children and adolescents with recurrent or refractory solid	No separable RMS data (no reply to email)

tumors: A Children's Oncology Group phase 1 and pilot consortium trial (ADVL1315)	
Target-driven exploratory study of imatinib mesylate in children with solid malignancies by the Innovative Therapies for Children with Cancer (ITCC) European Consortium	Wrong population (no RMS)
A phase I trial and pharmacokinetic study of aflibercept (VEGF trap) in children with refractory solid tumors: A Children's Oncology Group phase I consortium report	No separable RMS data (no reply to email)
Phase IB Study of Selinexor, a First-in-Class Inhibitor of Nuclear Export, in Patients With Advanced Refractory Bone or Soft Tissue Sarcoma	Wrong population (adults)
Treatment of advanced malignant solid tumors in children with autologous hematopoietic stem cell transplantation. [Chinese]	Wrong population (previously untreated)
Reirradiation of Pediatric Tumors Using Hypofractionated Stereotactic Radiotherapy	Wrong study design (retrospective)
Outcome and Patterns of Relapse in Childhood Parameningeal Rhabdomyosarcoma (pRMS) Treated With Proton Beam Therapy (PT)	Wrong study design (not a trial)
Phase II trial of cetuximab in patients with metastatic or locally advanced soft tissue or bone sarcoma	Wrong population (adults) (no RMS)
Gemcitabine and docetaxel combination chemotherapy for advanced bone and soft tissue sarcomas: protocol for an open-label, non-randomised, Phase 2 study	Wrong study design (protocol)
Addition of vincristine and irinotecan to vincristine, dactinomycin, and cyclophosphamide does not improve outcome for intermediate-risk rhabdomyosarcoma: A report from the children's oncology group	Wrong population (previously untreated)
Toxicity of hyperthermic intraperitoneal chemotherapy (HIPEC) in pediatric patients with sarcomatosis/carcinomatosis: early experience and phase 1 results	No separable RMS data (no reply to email)
SFCE METRO-01 four-drug metronomic regimen phase II trial for pediatric extracranial tumor	No separable RMS data (no reply to email)
Efficacy and morbidity of temporary (125)I brachytherapy in pediatric rhabdomyosarcomas	Wrong study design (retrospective)
Trabectedin Followed by Irinotecan Can Stabilize Disease in Advanced Translocation-Positive Sarcomas with Acceptable Toxicity	Wrong study design (not a trial)
Gemcitabine, Docetaxel, and Bevacizumab in Relapsed and Refractory Pediatric Sarcomas	Wrong population (no RMS)
[Use of LAK-cells and systemic chemotherapy with hyperthermia in the management of chemo-resistant tumors]	Wrong study design (case study) Duplicate
	consortium trial (ADVL1315)Target-driven exploratory study of imatinib mesylate in children with solid malignancies by the Innovative Therapies for Children with Cancer (ITCC) European ConsortiumA phase I trial and pharmacokinetic study of aflibercept (VEGF trap) in children with refractory solid tumors: A Children's Oncology Group phase I consortium reportPhase IB Study of Selinexor, a First-in-Class Inhibitor of Nuclear Export, in Patients With Advanced Refractory Bone or Soft Tissue SarcomaTreatment of advanced malignant solid tumors in children with autologous hematopoietic stem cell transplantation. [Chinese]Reirradiation of Pediatric Tumors Using Hypofractionated Stereotactic RadiotherapyOutcome and Patterns of Relapse in Childhood Parameningeal Rhabdomyosarcoma (pRMS) Treated With Proton Beam Therapy (PT)Phase II trial of cetuximab in patients with metastatic or locally advanced soft tissue or bone sarcomaGemcitabine and docetaxel combination chemotherapy for advanced bone and soft tissue sarcomas: protocol for an open-label, non-randomised, Phase 2 studyAddition of vincristine and irinotecan to vincristine, datinomycin, and cyclophosphamide does not improve outcome for intermediate-risk rhabdomyosarcoma: A report from the children's oncology groupToxicity of hyperthermic intraperitoneal chemotherapy (HIPEC) in pediatric patients with sarcomatosis/carcinomatosis: early experience and phase 1 resultsSFCE METRO-01 four-drug metronomic regimen phase II trial for pediatric extracranial tumorEfficacy and morbidity of temporary (125)I brachytherapy in pediatric rhabdomyosarcomasTrabectedin Followed by Irinotecan Can Stabilize Disease in Advanced Translocation-Positive Sarcom

	sarcoma	Wrong population (adults)
Jakob, 2012	Impact of hyperthermic isolated limb perfusion on tumour oxygenation in soft tissue sarcoma	Wrong population (adults)
Jiang, 2019	CD56-chimeric antigen receptor T-cell therapy for refractory/recurrent rhabdomyosarcoma A 3.5-year follow-up case report	Wrong study design (case study)
Kasper, 2004	High-dose chemotherapy with autologous peripheral blood stem cell transplantation for bone and soft-tissue sarcomas	Wrong population (adults)
Katzenstein, 2010	Intracavitary cisplatin therapy for pediatric malignancies	Wrong study design (retrospective)
Kim, 2020	Targeting Refractory Sarcomas and Malignant Peripheral Nerve Sheath Tumors in a Phase I/II Study of Sirolimus in Combination with Ganetespib (SARC023)	Wrong population (no RMS)
Klingebiel, 2008	Treatment of children with metastatic soft tissue sarcoma with oral maintenance compared to high dose chemotherapy: report of the HD CWS-96 trial	Wrong population (previously untreated)
Korzhikov, 2005	[Choice of treatment tactics for the recurrence of soft tissue malignant tumor]	Wrong population (adults)
Kostler, 2001	Docetaxel as rescue medication in anthracycline- and ifosfamide-resistant locally advanced or metastatic soft tissue sarcoma: results of a phase II trial	Wrong population (adults)
Kuhne, 2000	[Single and double high-dose chemotherapy with autologous stem cell transplantation in children with advanced solid tumors: first experiences]	Wrong study duration (before 2000)
Kushner, 2000	Pilot study of topotecan and high-dose cyclophosphamide for resistant pediatric solid tumors	Wrong study duration (before 2000)
Ladd, 2014	Risk and Resilience Factors for Grade Retention in Youth With Sickle Cell Disease	Wrong population (no RMS)
Ladra, 2014	Preliminary results of a phase II trial of proton radiotherapy for pediatric rhabdomyosarcoma	Wrong population (previously untreated)
Laetsch, 2018	Larotrectinib for paediatric solid tumours harbouring NTRK gene fusions: phase 1 results from a multicentre, open-label, phase 1/2 study	Wrong population (no RMS)
Lang, 2006	Haploidentical stem cell transplantation in patients with pediatric solid tumors: preliminary results of a pilot study and analysis of graft versus tumor effects	Wrong population (adults)
Lang, 2006	Haploidentical stem cell transplantation in patients with pediatric solid, tumors: Preliminary results of a pilot study and analysis of graft versus tumor	Duplicate
Lashkari, 2009	Tandem high-dose chemotherapy followed by autologous transplantation in patients with locally advanced or metastatic sarcoma	Wrong study duration (before 2000)
		Wrong population (adults)

n		
	European Organisation for the Research and Treatment of Cancer (EORTC) soft tissue and bone sarcoma group trial	
Lee, 2012	Phase II study of weekly docetaxel and fixed dose rate gemcitabine in patients with previously treated advanced soft tissue and bone sarcoma	Wrong population (adults)
Leyvraz, 2006	Treatment of advanced soft-tissue sarcomas using a combined strategy of high-dose ifosfamide, high-dose doxorubicin and salvage therapies	Wrong population (adults)
Li, 2011	Image-guided percutaneous (125)I seed implantation as a salvage treatment for recurrent soft tissue sarcomas after surgery and radiotherapy	Wrong population (adults)
Linden, 2008	Chemorefractory rhabdomyosarcoma treated with radiotherapy, bevacizumab, statins and surgery and maintenance with bevacizumab and chemotherapy	Wrong study design (case study) Wrong population (adults)
Loh, 2015	A phase 1 dosing study of ruxolitinib in children with relapsed or refractory solid tumors, leukemias, or myeloproliferative neoplasms: A Children's Oncology Group phase 1 consortium study (ADVL1011)	No separable RMS data (no reply to email)
LoRusso, 2011	Cediranib in combination with various anticancer regimens: results of a phase I multi-cohort study	Wrong population (adults)
Mackall, 2008	A pilot study of consolidative immunotherapy in patients with high-risk pediatric sarcomas	No separable RMS data (no reply to email)
Macy, 2013	A multi-center phase Ib study of oxaliplatin (NSC#266046) in combination with fluorouracil and leucovorin in pediatric patients with advanced solid tumors	No separable RMS data (no reply to email)
Mantadakis, 2000	Fractionated cyclophosphamide and etoposide for children with advanced or refractory solid tumors: A phase II window study	Wrong study duration (before 2000)
Martin-Liberal, 2018	Phase II Study of Gemcitabine Plus Sirolimus in Previously Treated Patients with Advanced Soft-Tissue Sarcoma: a Spanish Group for Research on Sarcomas (GEIS) Study	Wrong population (adults)
Mascarenhas, 2011	Randomized Phase II Window Trial of Two Schedules of Irinotecan With Vincristine in Patients With First Relapse or Progression of Rhabdomyosarcoma: A Report From the Children's Oncology Group (vol 28, pg 4658, 2010)	Duplicate
Mascarenhas, 2015	Randomized Phase II Window Trial of Two Schedules of Irinotecan With Vincristine in Patients With First Relapse or Progression of Rhabdomyosarcoma: A Report From the Children's Oncology Group (vol 28, pg 4658, 2010)	Duplicate
McGregor, 2008	Phase 1 study of an oxaliplatin and etoposide regimen in pediatric patients with recurrent solid tumors	Wrong population (no RMS)
McGregor, 2012	Dose escalation of intravenous irinotecan using oral cefpodoxime: A phase I study in pediatric patients with refractory solid tumors	Wrong population (no RMS)
Merimsky, 2000	Gemcitabine in soft tissue or bone sarcoma resistant to standard chemotherapy: a phase II study	Wrong study duration (before 2000)

		Wrong population (no RMS)
Miwa, 2017	Phase 1/2 study of immunotherapy with dendritic cells pulsed with autologous tumor lysate in patients with refractory bone and soft tissue sarcoma	Wrong population (no RMS)
Mixon, 2013	Vincristine, Irinotecan, and Temozolomide for Treatment of Relapsed Alveolar Rhabdomyosarcoma	Wrong study design (case study) (retrospective)
Mo, 2017	Feasibility and clinical value of CT-guided 125I brachytherapy for metastatic soft tissue sarcoma after first-line chemotherapy failure	Wrong population (adults) Wrong study design (retrospective)
Mosse, 2012	Pediatric phase I trial and pharmacokinetic study of MLN8237, an investigational oral selective small-molecule inhibitor of Aurora kinase A: A children's oncology group phase I consortium study	No separable RMS data (no reply to email)
Mowatt, 2011	Denosumab for the treatment of bone metastases from solid tumours	Wrong study design (systematic review protocol)
Muscal, 2013	A phase I trial of vorinostat and bortezomib in children with refractory or recurrent solid tumors: A Children's Oncology Group phase I consortium study (ADVL0916)	No separable RMS data (no reply to email)
Norris, 2014	Phase 1 evaluation of EZN-2208, a polyethylene glycol conjugate of SN38, in children adolescents and young adults with relapsed or refractory solid tumors	Wrong population (no RMS - confirmed by email)
Ohta, 2011	Allogeneic Hematopoietic Stem Cell Transplantation Against Recurrent Rhabdomyosarcoma	Wrong study design (case study)
Okada, 2013	Phase I study of bevacizumab plus irinotecan in pediatric patients with recurrent/refractory solid tumors	Wrong population (adults)
Osorio, 2018	Tandem thiotepa with autologous hematopoietic cell rescue in patients with recurrent, refractory, or poor prognosis solid tumor malignancies	No separable RMS data (no reply to email)
Pacey, 2009	Efficacy and safety of sorafenib in a subset of patients with advanced soft tissue sarcoma from a Phase II randomized discontinuation trial	Wrong population (adults) (no RMS)
Рарро, 2014	A phase 2 trial of R1507, a monoclonal antibody to the insulin-like growth factor-1 receptor (IGF-1R), in patients with recurrent or refractory rhabdomyosarcoma, osteosarcoma, synovial sarcoma, and other soft tissue sarcomas: results of a Sarcoma Alliance for Research Through Collaboration study	Wrong population (majority adults and no separable data for paediatric RMS)
Paz-Ares, 2012	Trabectedin in pre-treated patients with advanced or metastatic soft tissue sarcoma: a phase II study evaluating co-treatment with dexamethasone	Wrong population (adults)
Pein, 2007	Dose finding study of oral PSC 833 combined with weekly intravenous etoposide in children with relapsed or refractory solid tumours	Wrong study duration (before 2000)
Pili, 2012	Phase I study of the histone deacetylase inhibitor entinostat in combination with 13-cis retinoic acid in patients with solid tumours	Wrong population (adults)

Rheingold, 2007	Phase I trial of G3139, a bcl-2 antisense oligonucleotide, combined with doxorubicin and cyclophosphamide in children with relapsed solid tumors: A Children's Oncology Group study	No separable RMS data (no reply to email)
Rodriguez- Galindo, 2006	Phase I study of the combination of topotecan and irinotecan in children with refractory solid tumors	Wrong study duration (before 2000)
Rosenblatt, 2003	Interstitial brachytherapy in soft tissue sarcomas: the Rambam experience	Wrong population (no RMS)
Saint-Blancard, 2008	Localised relapse of orbital embryonal rhabdomyosarcoma	Wrong study design (case study)
Santana, 2020	A phase 1 trial of everolimus and bevacizumab in children with recurrent solid tumors	No separable RMS data (no reply to email)
Schafer, 2018	A phase 1 study of eribulin mesylate (E7389), a novel microtubule-targeting chemotherapeutic agent, in children with refractory or recurrent solid tumors: A Children's Oncology Group Phase 1 Consortium study (ADVL1314)	Wrong population (no RMS)
Schelman, 2013	A phase I study of vorinostat in combination with bortezomib in patients with advanced malignancies	Wrong population (adults)
Schliemann, 2020	First-in-class cd13-targeted tissue factor ttf-ngr in patients with recurrent or refractory malignant tumors: Results of a phase i dose-escalation study	Wrong population (adults)
Schmitt, 2016	Vorinostat in refractory soft tissue sarcomas - Results of a multi-centre phase II trial of the German Soft Tissue Sarcoma and Bone Tumour Working Group (AIO)	Wrong population (adults)
Schober, 2018	Donor lymphocyte infusions in adolescents and young adults for control of advanced pediatric sarcoma	Wrong study design (retrospective)
Schoffski, 2013	An open-label, phase 2 study evaluating the efficacy and safety of the anti-IGF-1R antibody cixutumumab in patients with previously treated advanced or metastatic soft-tissue sarcoma or Ewing family of tumours	Wrong population (adults)
Schoffski, ,2018	The tyrosine kinase inhibitor crizotinib does not have clinically meaningful activity in heavily pre-treated patients with advanced alveolar rhabdomyosarcoma with FOXO rearrangement: European Organisation for Research and Treatment of Cancer phase 2 trial 90101 'CREATE'	No separable RMS data (no reply to email)
Schuetze, 2016	SARC009: Phase 2 study of dasatinib in patients with previously treated, high-grade, advanced sarcoma	Wrong population
Schulte, 2021	Phase II study of pazopanib with oral topotecan in patients with metastatic and non-resectable soft tissue and bone sarcomas	Wrong population (adults)
Segal, 2016	Results from an Integrated Safety Analysis of Urelumab, an Agonist Anti-CD137 Monoclonal Antibody	Wrong population (adults) (no RMS)
Seitz, 2011	Treatment efficiency, outcome and surgical treatment problems in patients suffering from localized embryonal bladder/prostate rhabdomyosarcoma: a report from the Cooperative Soft Tissue Sarcoma trial CWS-96	Wrong population (previously untreated)

Sergeeva, 2019	Results of bladder rhabdomyosarcoma treatment under cws-	Wrong population (previously
	guidance 2009 protocol. [Russian]	untreated)
Shapiro, 2013	Phase I safety, pharmacokinetic, and pharmacodynamic study of SAR245408 (XL147), an oral pan-class i PI3K inhibitor, in patients with advanced solid tumors AC	Wrong population (adults)
Sharma, 2015	Perioperative high-dose-rate interstitial brachytherapy combined with external beam radiation therapy for soft tissue	Wrong population (adults)
	sarcoma	Wrong study design (not a trial)
Shemesh, 2019	Population pharmacokinetics, exposure-safety, and immunogenicity of atezolizumab in pediatric and young adult patients with cancer	No separable RMS data (no reply to email)
Sidi, 2007	Use of amifostine in the treatment of recurrent solid tumours in children	Wrong outcome (intervention for side effects)
Simpson, 2010	Trabectedin for the treatment of advanced metastatic soft tissue sarcoma	Wrong study design (not a trial)
Spunt, 2011	Phase I study of temsirolimus in pediatric patients with recurrent/refractory solid tumors	No separable RMS data (no reply to email)
Stewart, 2009	Decitabine effect on tumor global DNA methylation and other parameters in a phase I trial in refractory solid tumors and lymphomas	Wrong population (adults)
Sugiura, 2010	Multicenter Phase II trial assessing effectiveness of imatinib mesylate on relapsed or refractory KIT-positive or PDGFR- positive sarcoma	Wrong outcome (no efficacy data for RMS)
Sun, 2016	Safety, pharmacokinetics, and antitumor properties of anlotinib, an oral multi-target tyrosine kinase inhibitor, in patients with advanced refractory solid tumors	Wrong population (adults)
Takagi, 2019	Phase i clinical study of oral olaparib in pediatric patients with refractory solid tumors: Study protocol	Wrong study design (protocol)
Takahashi, 2013	Phase II study of personalized peptide vaccination for refractory bone and soft tissue sarcoma patients	Wrong population (adults)
Takeuchi, 2007	Caffeine-potentiated chemotherapy for patients with high- grade soft tissue sarcoma: long-term clinical outcome	Wrong population (majority previously untreated)
Tanaka, 2020	Possibility for Dose Optimization of Pazopanib from Its Plasma Concentration in Japanese Patients with Cancer	Wrong population (adults)
Thornton, 2013	A dose-finding study of temsirolimus and liposomal doxorubicin for patients with recurrent and refractory bone and soft tissue sarcoma	No separable RMS data (no reply to email)
Trucco, 2018	A phase II study of temsirolimus and liposomal doxorubicin for patients with recurrent and refractory bone and soft tissue sarcomas	No separable RMS data (no reply to email)
Ueda, 2014	Phase I and pharmacokinetic study of trabectedin, a DNA minor groove binder, administered as a 24-h continuous infusion in Japanese patients with soft tissue sarcoma	Wrong population (adults)
Vaarwerk, 2019	AMORE treatment as salvage treatment in children and young adults with relapsed head-neck rhabdomyosarcoma	Wrong study design (not a trial)

Van der Graaf, 2012	Pazopanib for metastatic soft-tissue sarcoma (PALETTE): a randomised, double-blind, placebo-controlled phase 3 trial	Wrong population (adults)
Van Winkle, 2005	Ifosfamide, carboplatin, and etoposide (ICE) reinduction chemotherapy in a large cohort of children and adolescents with recurrent/refractory sarcoma: the Children's Cancer Group (CCG) experience	Wrong study duration (before 2000)
Vassal, 2003	A phase I study of irinotecan as a 3-week schedule in children with refractory or recurrent solid tumors	Wrong study duration (before 2000)
Veitch, 2019	A phase II study of ENMD-2076 in advanced soft tissue sarcoma (STS)	Wrong population (adults)
Vermorken, 2013	A phase ib, open-label study to assess the safety of continuous oral treatment with afatinib in combination with two chemotherapy regimens: cisplatin plus paclitaxel and cisplatin plus 5-fluorouracil, in patients with advanced solid tumors	Wrong population (adults)
Vidal, 2012	Phase I clinical and pharmacokinetic study of trabectedin and carboplatin in patients with advanced solid tumors	Wrong population (adults)
Villablanca, 2006	Phase I trial of oral fenretinide in children with high-risk solid tumors: a report from the children's oncology group (CCG 09709)	Wrong population (no RMS)
Wang, 2015	Significant Reduction of Late Toxicities in Patients With Extremity Sarcoma Treated With Image-Guided Radiation Therapy to a Reduced Target Volume: Results of Radiation Therapy Oncology Group RTOG-0630 Trial	Wrong population (adults)
Weber, 2016	Pencil Beam Scanning Proton Therapy for Pediatric Parameningeal Rhabdomyosarcomas: Clinical Outcome of Patients Treated at the Paul Scherrer Institute	Wrong population (previously untreated) Wrong study design (retrospective)
Weidenbusch, 2018	Transcriptome based individualized therapy of refractory pediatric sarcomas: feasibility, tolerability and efficacy	Wrong population
Westermann, 2003	A Systemic Hyperthermia Oncologic Working Group trial. Ifosfamide, carboplatin, and etoposide combined with 41.8 degrees C whole-body hyperthermia for metastatic soft tissue sarcoma	Wrong population (adults)
Wolden, 2005	Intensity-modulated radiotherapy for head-and-neck rhabdomyosarcoma	Wrong study design (not a trial)
Woll, 2012	Adjuvant chemotherapy with doxorubicin, ifosfamide, and lenograstim for resected soft-tissue sarcoma (EORTC 62931): a multicentre randomised controlled trial	Wrong population (previously untreated) (no RMS)
Wood, 2018	A phase I study of panobinostat in pediatric patients with refractory solid tumors, including CNS tumors	No separable RMS data (no reply to email)
Wrasidlo, 2002	Pilot study of hydrolytically activated paclitaxel prodrug therapy in patients with progressive malignancies	Wrong population (adults)
Wu, 2007	Continuous-infusion high dose ifosfamide as salvage treatment for pre-treated soft tissue sarcoma in teenage patients. [Chinese]	No separable RMS data (no reply to email)

Yamada, 2007	High-dose chemotherapy and autologous peripheral blood stem cell transfusion for adult and adolescent patients with small round cell sarcomas	Wrong population (previously untreated)
Yang, 2012	Intensity modulated radiation therapy with dose painting to treat rhabdomyosarcoma	Wrong study design (retrospective)
Yang, 2013	Intensity-modulated radiation therapy with dose-painting for pediatric sarcomas with pulmonary metastases	Wrong study design (retrospective)
Yoo, 2013	Multicenter phase II study of everolimus in patients with metastatic or recurrent bone and soft-tissue sarcomas after failure of anthracycline and ifosfamide	Wrong population (adults)
Zapletalova, 2012	Metronomic Chemotherapy with the COMBAT Regimen in Advanced Pediatric Malignancies: A Multicenter Experience	No separable RMS data (no reply to email)
Zhang, 2014	A prospective evaluation of the combined helical tomotherapy and chemotherapy in pediatric patients with unresectable rhabdomyosarcoma of the temporal bone	Wrong population (previously untreated)
Zhao, 2017	Clinical application of 125I radioactive seeds brachytherapy in the treatment of the pediatric soft tissue sarcoma in head and neck. [Chinese]	Wrong study design (retrospective chart review)
Zhao, 2017	[Clinical application of 125I radioactive seeds brachytherapy in the treatment of the pediatric soft tissue sarcoma in head and neck]	Duplicate
Zhou, 2015	Prospective clinical study of pre-operative SIB-IMRT in preparing surgical boundary of extremity soft tissue sarcoma	Wrong population (no RMS)
Zorzi, 2013	A phase I study of histone deacetylase inhibitor, pracinostat (SB939), in pediatric patients with refractory solid tumors: IND203 a trial of the NCIC IND program/C17 pediatric phase I consortium	No separable RMS data (no reply to email)

RMS, rhabdomyosarcoma

Appendix 4

Risk of Bias for Single-Arm Studies, based on the Downs and Black Quality Assessment Checklist.

					Reporting	B				Exte	ernal Vali	dity	In	ternal Va	alidity- Bi	as	Power
Author, Year	1	2	3	4	6	7	8	9	10	11	12	13	16	18	19	20	27
Akazawa, 2019																	
Ali, 2016																	
Amoroso, 2020																	
Aquino, 2004																	
Bagatell, 2014																	
Baird, 2012																	
Baruchel, 2012																	
Beaty, 2010																	
Becher, 2017																	
Bisogno, 2005																	
Bisogno, 2021																	
Blaney, 2001																	
Blank et al, 2009																	
Bomgaars, 2006																	
Bomgaars, 2007																	
Burke, 2015																	
Casanova, 2002																	
Casanova, 2004																	

					Reportin	g				Exte	ernal Val	dity	In	ternal V	alidity- B	ias	Power
Author, Year	1	2	3	4	6	7	8	9	10	11	12	13	16	18	19	20	27
Casanova, 2020																	
Compostella, 2019																	
Lee, 2016																	
Davidson, 2002																	
Davis, 2020																	
De Pasquale, 2011																	
De Sio, 2006																	
El kababri, 2020																	
Epelman, 2015																	
Federico, 2020a																	
Federico, 2020b																	
Fischer, 2021																	
Fouladi, 2006																	
Fouladi, 2015																	
Fox, 2015																	
Frappaz, 2016																	
Furman, 2006																	
Gaspar, 2021																	
Geller, 2020																	
Geoerger, 2008																	

					Reportin	g				Exte	ernal Val	idity	In	ternal V	alidity- B	ias	Power
Author, Year	1	2	3	4	6	7	8	9	10	11	12	13	16	18	19	20	27
Geoerger, 2011																	
Geoerger, 2012																	
Geoerger, 2020a																	<u> </u>
Geoerger, 2020b	<u> </u>												ļ				
Geoerger, 2021																	
George, 2010																	
Glade Bender, 2013													<u> </u>				
Hawkins, 2006	<u> </u>																
Hegde, 2020																	
Hoffer, 2009																	
Hont, 2019																	
Ismail-zade, 2010																	
Jacobs, 2010																	
Jakacki, 2008																	
Jiang, 2016																	
Johansen, 2006																	
Kawamoto, 2010																	
Kebudi, 2004																	
Kieran, 2005																	
Kieran, 2017																	

					Reportin	g				Exte	ernal Vali	dity	In	ternal Va	alidity- B	ias	Power
Author, Year	1	2	3	4	6	7	8	9	10	11	12	13	16	18	19	20	27
Kim, 2015																	
Kolb, 2015																	
Krishnadas, 2015																	
Kuttesch, 2009																	
Lam, 2015																	
Langevin, 2003																	
Langevin, 2008																	
Le Teuff, 2020																	
Liu, 2020																	
Llosa, 2017																	
Loss, 2004																	
Makimoto, 2019																	
Marina, 2002																	
Mascarenhas, 2013																	
Mascarenhas, 2019b (Regimen 2)																	
Mascarenhas, 2019b (Regimen 3)																	
Mascarenhas, 2021																	
McCowage, 2011																	
McGregor, 2009																	
McNall-Knapp, 2010																	

					Reportin	g				Exte	ernal Vali	dity	In	ternal Va	alidity- B	ias	Power
Author, Year	1	2	3	4	6	7	8	9	10	11	12	13	16	18	19	20	27
Meazza, 2009																	
Meazza, 2010																	
Merchant, 2012																	
Merchant, 2016a																	
Merchant, 2016b																	
Merker, 2019																	
Minard-Colin, 2012																	
Moreno, 2018																	
Morgenstern, 2014																	
Mosse, 2019																	
Navid, 2013																	
Norris, 2018																	
Oda, 2020																	
Perez-Martinez, 2012																	
Prete, 2010																	
Radhakrishnan, 2015																	
Reed, 2016																	
Ruano, 2020																	
Rubie, 2010																	
Santana, 2003																	

					Reportin	g				Exte	ernal Val	idity	In	ternal V	alidity- B	ias	Power
Author, Year	1	2	3	4	6	7	8	9	10	11	12	13	16	18	19	20	27
Sawada, 2016																	
Saylors, 2001																	
Schafer, 2020																	
Shiriaev, 2013																	
Shitara, 2006																	
Souid, 2003																	
Souid, 2010																	
Spunt, 2007																	
Stempak, 2006																	
Streby, 2017																	
Streby, 2019																	
Tsuchiya, 2018																	
Vassal, 2007																	
Vo, 2017																	
Wagner-Bohn, 2006																	
Wagner, 2010																	
Wagner, 2013																	
Wagner, 2015																	
Warwick, 2013																	
Weigel, 2014																	

					Reporting	g				Exte	ernal Val	idity	In	ternal Va	alidity- Bi	as	Power
Author, Year	1	2	3	4	6	7	8	9	10	11	12	13	16	18	19	20	27
Wells, 2002				T													
Widemann, 2009																	
Widemann, 2012																	
Worst, 2016																	
Yalcin, 2004																	
Zwerdling, 2006																	
1. Aims/Objective reported? 2. Main outcor described? 9. Are subjects lost to follow-up recruited? 13. Were the facilities were su	o described bjects wer	d? 10. Are	the p-valu representa	es reporte ntive? 16. I	d? 11. We Have unpl	re recruite anned and	ed subject. Ilyses beer	s represen 1 clearly in	tative of to dicated? 1	he populat 18. Were si	tion of inte tatistical t	erest? 12. ests appro	Were enro	olled subje	cts repres	entative o	of those

					Repo	orting					Exter	nal Va	lidity		Ir	nterna	l Valid	ity- Bia	as		Int			y- Con on Bia	ifound s)	ing	Pow er
Author, Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Defachelles, 2021																											
Mascarenhas, 2010																											
Mascarenhas, 2019a																											
Shook, 2013																											
Pramanik, 2017																					1						
Petrilli, 2004																											
1. Aims/Objective rep described? 7. Randon representative of the to study intervention? Were statistical tests the same time?* 23. S determining sample s	n varia popule ?* 15. appro Subjec	ition oj ation c Outcoi priate ts ranc	f data of inter me ass ? 19. C lomise	descrit est? 1 essors omplic	bed? 8 2. Wer blinde ance w	. Advei e enro ed to si ith the	rse eve lled su tudy in interv	nts de bjects terven ention	scribed repres tion?* reliab	d? 9. A entativ 16. Ha le? 20.	re subj ve of th ave unj Main	ects lo nose re planne outcor	st to fo cruited d anal me me	ollow-u d? 13. N yses be asures	ip desc Were t een cle reliabl	cribed? he fac arly in le? 21.	P 10. A ilities v dicate Subje	re the were si d? 17. cts rec	p-value ubjects Analys ruited	es repo s were ses adj from s	orted? treate usted j ame p	11. Wo d repre for diff opulat	ere rec esenta erent f ion?* .	ruited tive? 1 follow- 22. Sul	subjec 4. Subj up tim bjects i	ts iects b es?* 1 recruit	.8.

Risk of Bias for Multi-Arm Studies, based on the Downs and Black Quality Assessment Checklist.