

**Table 2** Summary of ongoing or upcoming rapamycin clinical trials\*

Population	mTOR Inhibitor Dosing Regimen	Duration	Study Design	Primary Endpoint	Status	Study Name and/or NCT#
100 adults (30–90y)	Off label use of rapamycin or everolimus, varied doses	Single time point	Cross-sectional	Lower HOMA-IR in rapamycin treated vs. non-treatment control	Ongoing	RAP PROTECT, Communication with Dudley Lamming
10 young men (22–35y)	Single dose of Rapamycin 16 mg or Placebo	Once	Non-randomized, double-blinded, placebo controlled, cross-over design	Post-exercise, insulin stimulated muscle glucose uptake	Ongoing	NCT05233722, Communication with Jørgen Wojtaszewski
35 residents $\geq$ 65y in nursing homes with COVID	RTB101 10 mg daily Placebo	4 weeks	Randomized, double-blinded, placebo-controlled	Percentage of people who develop laboratory confirmed COVID-19	Pending	NCT04409327, Communication with Joan Mannick
72 adults (55–80y)	Rapamycin 5, 10, or 15 mg weekly Everolimus 5, 10, or 15 mg weekly	6 weeks	Allocated, open label, dose finding trial	Dose limited toxicities to determine RP2D	Active, Not yet recruiting	RAP PAC, NCT05949658 Adam Konopka
50 patients with periodontitis	Rapamycin 5 mg weekly Placebo	8 weeks	Randomized, placebo-controlled	Clinical attachment loss	Not active	Communication with Jonathan An
50 Women with premature ovarian failure	Rapamycin 5 mg weekly Placebo	12 weeks	Randomized, placebo-controlled	Ovarian reserve	Ongoing	VIBRANT, NCT05836025 Communication with Samuel Williams and Yousin Suh
16 males age $\geq$ 65y	Rapamycin 1 mg daily Placebo	16 weeks	Randomized, single-blinded, placebo-controlled, unilateral resistance exercise training vs. sedentary contralateral leg	Change in muscle mass	Ongoing	NCT05414292
72 adults with insulin resistance (55–80y)	Everolimus 0.5 mg daily Everolimus 5 mg weekly Placebo	24 weeks	Randomized, double-blinded, placebo-controlled	Change in peripheral insulin sensitivity	Ongoing	EVERLAST, NCT05835999 Adam Konopka
150 adults ( $\geq$ 50y)	Rapamycin 5 mg weekly Rapamycin 10 mg weekly Placebo	12 months	Prospective, randomized, placebo-controlled	Change in visceral fat	Ongoing	PEARL, NCT04488601 Communication with Sajad Zalzala
40 patients with MCI/early AD	Rapamycin 1 mg daily Placebo	12 months	Randomized, double-blinded, placebo-controlled	Number of adverse events	Ongoing	REACH, NCT04629495 Communication with Mitzi Gonzales

\*Studies are presented as observational study first, followed by studies with increasing rapamycin treatment duration