



Department of Epidemiology
Johns Hopkins Bloomberg School of Public Health
415 N. Washington Street, 2nd Floor
Baltimore, Maryland 21231

24 September 2019

Memorandum

To: Trialists
Fr: Curtis Meinert
Re: The trend in trials

The tables below suggest trials are getting smaller and shorter. Not the direction they should be headed.

The trend reminds me of a television series years back when contestants bid the number of notes needed to name a tune. Bidding started with 7 notes, then down one note at a time until a contestant quit bidding with the other having to name the tune in the number of notes bid.

Thirty-six percent of trials started 2004-08 were completed in that time period compared to 53% of trials started 2009-13, and 58% of trials started 2014-18 (**Table 1**). Those results were accompanied by reduced sample sizes. The median sample size for trials started 2004-08 and completed in that time interval was 60 compared to 50 for trials started and completed 2014-18 (**Table 2**).

The basics of trials have not changed. The approach to design and sample size calculation is the same. The most likely explanation is smaller budgets, relaxed power requirements, and outcomes requiring less time for followup.

Table 1. Completion rates of trials registered on CT.gov by when started and completed

	Trials started	# completed thru 2008	# completed thru 2013	# completed thru 2018	% completed thru 2008	% completed thru 2013	% completed thru 2018
2004-08	45,536	16,390	36,610	39,026	35.99%	80.40%	85.70%
2009-13	70,765	--	37,443	66,921	--	52.91%	94.57%
2014-18	94,889	--	--	54,843	--	--	57.80%

Table 2. Median sample size and interquartile range (IQR) of trials registered on CT.gov by when started and when completed

	Trials started	Mdn SS: Trials completed thru 2008	Mdn SS: Trials completed thru 2013	Mdn SS: Trials completed thru 2018	IQR: Trials completed thru 2008	IQR: Trials completed thru 2013	IQR: Trials completed thru 2018
2004-08	45,497	60	61	62	28-200	28-185	28-188
2009-13	70,575	--	50	57	--	22-120	24-145
2014-18	93,520	--	--	50	--	--	24-119