



(Thursday) 5 July 2012

**Memorandum**

To: Trialists

Fr: Curtis Meinert

Re: Troublesome terms and phrases

I sent an e-mail (Fri 29 June 2012; 9:24am) to people to whom I distribute my blogs posted on [trialsmeinertsway.com](http://trialsmeinertsway.com). I asked them for their lists of terms in trials that, in their experience, are widely misunderstood, misinterpreted, or misused.

What follows is the log of responses to the e-mail with only minimal editing by me. Responses were to me only, me and another person, or to "all" (coverage in response indicated in parentheses following the respondents name).

Thanks for the feedback!

**Roy Beck (me)** **29 June 9:28am**

"Patient was randomized" as opposed to "patient was randomly assigned".

**Mark Van Natta (me)** **29 June 9:38am**

Stratification  
Crude  
Subject  
Significant  
Overrepresented/underrepresented  
Randomization means balance across treatment groups  
Blind  
Subgroup analysis

**Jay Herson (me; several e-mails)** **29 June 9:47 - 10:12am**

Parameter is often used to mean a variable that we measure on patients such as WBC. A parameter is really something we estimate from a distribution like mean, variance.

Proportional hazards regression is often called a multivariate analysis. The writer means multiple variable analysis. Proportional hazards regression is a univariate analysis of a hazard ratio.

Also, people are still writing preventative whereas I believe the only correct word is preventive.

Using "study" instead of "trial".  
"Data" is a plural word. "Datum" is the singular.

Troublesome terms and phrases  
5 July 2012

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I see a lot of principle investigator instead of principal.

- Dave Shade (me)** **29 June 10:16am**  
 EMOTIONAL (words that may cause unintended reactions)  
 Fraud  
 Integrity  
 Ethical (usually used as "unethical")  
 Investigator (when used to distinguish from "coordinator")  
 DEFINITIONAL (words that may create confusion because of imprecision in use)  
 Enrolled  
 Screened  
 Lost to follow-up / Dropout  
 Withdrawn
- Lea Drye (me)** **29 June 10:49am**  
 endpoint  
 single, double, triple blinding/masking  
 allocation concealment  
 cross-over  
 primary  
 power  
 null vs negative  
 baseline  
 drop-out
- Janet Wittes (all)** **29 June 10:51am**  
 intent-to-treat  
 modified intent-to-treat  
 per protocol
- David Sackett (me)** **29 June 12:20pm**  
 worst one of all time (for me anyway): "no difference" (in outcomes, efficacy, etc) based  
 on  $p > 0.05$
- Barbara Hawkins (me)** **29 June 12:28pm**  
 double-blind  
 single-blind  
 open-label  
 intent-to-treat and modifications thereof  
 computer generated randomization (and variations)
- Rick Ferris (me)** **29 June 12:50pm**  
 I can start with "Double Blind" in eye trials
- Anne Lindblad (all)** **29 June 1:24pm**  
 evaluable  
 surrogate  
 biomarker  
 pragmatic  
 adaptive

Troublesome terms and phrases  
5 July 2012

---

comparative effectiveness  
"non-inferiority" (probably along with "crossover design").

**Bob Wise (me)**

**29 June 1:26pm**

Enroll, enrollment - randomized?, signed consent?, entered run-in or screening period?

Baseline - First visit?, Randomization visit?, Before first visit?, Before cross-over period?

Screen, pre-screened - chart review?, collected data for eligibility?

Malpractice - breach of community standard of care?

End of study - last patient completed?, dataset closed?, no more main analyses?, no more analysis of data?, data destroyed?

Anonymized, De-identified, Coded - impossible to identify?, hard to identify?, easy to identify but promise not to identify?

Drop-out - Refused treatment?, refused follow-up?, whereabouts unknown?

Withdrew consent - drop-out?

Lost to follow-up - drop-out?

Random sample - convenient sample?, casual sample?

Randomized - randomly assigned to treatment group?, randomly assigned to treatment group and agreed to take treatment?, randomly assigned to treatment group and took at least one dose of treatment?

Possibly related (as in adverse event) - May or may not be related?, who knows?, reasonably likely to be related?

Medical device - anything from an implanted heart valve to an ipad the patient uses to complete forms

Unethical - Abridging human rights and societal norms?, not in compliance with IRB regulations?, something I do not agree with but cannot quite articulate the reason?

Validated (as in questionnaire/tool/instrument/test) - Intensively studied and shown to have excellent reliability, accuracy, predictive, discriminant, and psychometric properties?, something that has been used in the past?

**Tom Louis (all)**

**29 June 1:28pm**

Janet has identified the big deal words and phrases. I offer up the following additions:

as treated

off study

eligibility exception

And, early stopping:

Troublesome terms and phrases  
5 July 2012

---

In my experience a trial always stops at the end! If there is a monitoring plan, then the stopping is not "early", it is what it is. If there is no monitoring plan, I suppose a study that stops before the anticipated accrual or follow-up has stopped early.

**Rick Ferris** (me and Anne Lindblad) **29 June 12:29pm**  
"non-inferiority"

**Rick Ferris** (me) **29 June 12:33pm**  
"on treatment analysis"

**Janet Wittes** (all) **29 June 2:04pm**  
And should we worry about patients, participants, volunteers, and subjects?

**Anne Lindblad** (all) **29 June 2:05pm**  
IRB; defined incorrectly as "Investigational Review Board" instead of "Institutional Review Board"

**Steve Piantadosi** (all) **29 June 2:06pm**  
Guinea pig: ALWAYS used to make clinical trials and trialists look evil. Should be attacked and destroyed wherever it is seen. Possible exception: Endersby, "A Guinea Pig's History of Biology" (2007).

Phase <anything>: useless nonsense intended to make the speaker feel good or look smart

Pilot: devoid of definition and meaning and typically exactly the wrong metaphor

Stratification: misused and misunderstood by clinicians routinely

Theory: one of those rare words that has two exactly opposite meanings (like cleave). Great care is needed when using.

Subject/patient: not the same things

Randomization: almost never technically correct but takes too long to explain. Notice I did not say "randomize".

Race/gender/sex: and any other construct that is at most a surrogate but promulgated as true biology

And finally I add with some trepidation "rate" in recollection of a long argument with XX, who never got it right. It is almost always used incorrectly to represent a proportion.

**Gabrile Jenkins** (me) **29 June 2:09pm**  
clinically significant  
sufficient  
as judged by  
in the opinion of  
baseline/baseline visit (no clear definition of the baseline visit; baseline data are collected over a number of days)

Troublesome terms and phrases  
5 July 2012

---

approved (varying levels of approval; conditional approval, full approval) with regard to IRB/REB)  
protocol (varying interpretations)  
missing data (are data really missing or accounted for by missing data form)

**Jay Herson** (all) **29 June 2:20pm**  
What about "generally well-tolerated"

**Kay Dickersin** (all) **29 June 2:29pm**  
Jay, I think the UK uses preventative

**Barbara Hawkins** (all) **29 June 2:59pm**  
I do not like "subjects"! Patients, participants, candidates, screenees, enrollees, etc. are preferred, depending on the context.

**Janet Wittes** (all) **29 June 4:38pm**  
I personally prefer participants and volunteers (the Army's term).

**Dale Williams** (all) **29 June 4:41pm**  
My vote for words/phrases that are not consistently used and thus create some confusion are:  
blocked randomization  
permuted randomization  
permuted block randomization

**Janet Wittes** (all) **29 June 4:45pm**  
And I have two more...expected and anticipated when talking about adverse events

**Rick Ferris** (me and Janet W) **29 June 4:45pm**  
Might as well add "unexpected", "severe" and "serious".

**Janet Wittes** (me and Rick F) **29 June 4:48pm**  
Agree!!!

And how about "related"

**Steve Goodman** (all) **29 June 5:20pm**  
Well, for a start, there's "random" (as in haphazard), then there's "controlled" (as in diet), and finally "trial" (as in "We'll try something, then if that doesn't work, we'll try something else). And then there is a "case-control trial".

It's all downhill from there.

**Tom Louis** (all) **29 June 5:21pm**  
Ok, now that we're up to speed,

"There is a trend towards statistical significance."

As carefully as I have looked at the object of this kind of statement, I've never seen it move.

Troublesome terms and phrases  
5 July 2012

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**Barbara Hawkins (all)** **2 July 8:56am**

Tom that is one of my favorites also. In addition, "x is more likely than y to z" when referring to the observation from a single study when what the author really means is that in his/her study, "x more often than y . . ."

**Janet Wittes (all)** **2 July 8:59am**

And here is another "an exact test" - as if exactness means uniqueness

**Kay Dickersin (all)** **2 July 10:50am**

"observational trials"

**Al Sommer (all)** **2 July 10:52am**

While I've not chimed in, since you are all so far ahead of me, I wanted to let you know I am thoroughly enjoying this long-overdue goring of sacred cows! Congratulations (as usual) to my imbibing buddy, Curt, for having set this up to be knocked down. The entire vocabulary might be altered forever (might I suggest simultaneous editorials, or a multi-journal "consort" statement banning certain words and verbiage and substituting alternatives)?

**Anne Casper (me)** **3 July 9:14am**

Pre-screen/screen/determining which patients to count as "ineligible patients"

Visit/contact; a one-time event or can it be broken into several shorter visits/contacts over several days, particularly challenging in relation to the baseline/ randomization visit and determining eligibility

Protocol deviation

Remission, responders, especially as measured on subjective assessments

Any phrase that leaves wiggle room for eligibility criteria (clinical judgment, as determined by study physician, etc.)

Washout

Treatment termination/taper of study drug/interruption/ reinstatement (especially challenging when measuring drug adherence with pill counts)

Expected/unexpected adverse events

Consent withdraw

primary outcome (when more than one is listed)

