

## Materials for in-class exercise (20 Aug 2017):

### Diagnosis

Lu Y, Meng Z, Pan X, Qin L, Wang G. Value of high-frequency ultrasound in diagnosing carpal tunnel syndrome. *International Journal of Clinical and Experimental Medicine*. 2015; 8(12): 22418–22424. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4730008/>

### Prognosis

Padua L, Padua R, Aprile I, Pasqualetti P, Tonali P. Multiperspective follow-up of untreated carpal tunnel syndrome: a multicenter study. *Neurology*. 2001 Jun 12;56(11):1459-66. <https://www.ncbi.nlm.nih.gov/pubmed/11402101>

### RCT

Chung VC, Ho RS, Liu S, Chong MK, Leung AW, Yip BH, et al. Electroacupuncture and splinting versus splinting alone to treat carpal tunnel syndrome: a randomized controlled trial. *Canadian Medical Association Journal*. 2016 Sep 6;188(12):867-75. <https://www.ncbi.nlm.nih.gov/pubmed/27270119>

## Readings for Session on 20 Aug 2017:

### Diagnosis

1. Altman DG, Bland JM. Diagnostic tests 1: sensitivity and specificity. BMJ. 1994 Jun 11;308(6943):1552. <https://doi.org/10.1136/bmj.308.6943.1552>
2. Altman DG, Bland JM. Diagnostic tests 2: predictive values. BMJ. 1994 Jul 9;309(6947):102. <https://doi.org/10.1136/bmj.309.6947.102>
3. Altman DG, Bland JM. Diagnostic tests 3: receiver operating characteristic plots. BMJ. 1994 Jul 16;309(6948):188. <https://doi.org/10.1136/bmj.309.6948.188>
4. Deeks JJ, Altman DG. Diagnostic tests 4: likelihood ratios. BMJ. 2004 Jul 17;329(7458):168-9. <https://doi.org/10.1136/bmj.329.7458.168>
5. Walley T. Evaluating laboratory diagnostic tests. BMJ. 2008 Mar 15; 336(7644): 569-570. <https://doi.org/10.1136/bmj.39513.576701.80>
6. Mallett S, Deeks JJ, Halligan S, Hopewell S, Cornelius V, Altman DG. Systematic reviews of diagnostic tests in cancer: review of methods and reporting. BMJ. 2006 Aug 26;333(7565):413. <https://doi.org/10.1136/bmj.38895.467130.55>
7. Bossuyt PM, Irwig L, Craig J, Glasziou P. Comparative accuracy: assessing new tests against existing diagnostic pathways. BMJ. 2006 May 6;332(7549):1089-92. <https://doi.org/10.1136/bmj.332.7554.1368-a>
8. Bossuyt PM, Reitsma JB, Bruns DE, Gatsonis CA, Glasziou PP, Irwig L, et al. STARD 2015: an updated list of essential items for reporting diagnostic accuracy studies. BMJ. 2015 Oct 28;351:h5527. <https://doi.org/10.1136/bmj.h5527>

### Prognosis

1. Altman DG, Vergouwe Y, Royston P, Moons KG. Prognosis and prognostic research: validating a prognostic model. BMJ. 2009 May 28;338:b605. <http://www.bmj.com/content/338/bmj.b605>
2. Moons KG, Altman DG, Vergouwe Y, Royston P. Prognosis and prognostic research: application and impact of prognostic models in clinical practice. BMJ. 2009 Jun 4;338:b606. <http://www.bmj.com/content/338/bmj.b606>

3. Moons KG, Royston P, Vergouwe Y, Grobbee DE, Altman DG. Prognosis and prognostic research: what, why, and how? *BMJ*. 2009 Feb 23;338:b375.  
<http://www.bmj.com/content/338/bmj.b375>
4. Royston P, Moons KG, Altman DG, Vergouwe Y. Prognosis and prognostic research: Developing a prognostic model. *BMJ*. 2009 Mar 31;338:b604.  
<http://www.bmj.com/content/338/bmj.b604>
5. Peat G, Riley RD, Croft P, Morley KI, Kyzas PA, Moons KG, et al. Improving the transparency of prognosis research: the role of reporting, data sharing, registration, and protocols. *PLoS Med*. 2014 Jul 8;11(7):e1001671.  
<https://doi.org/10.1371/journal.pmed.1001671>
6. Hemingway H, Croft P, Perel P, Hayden JA, Abrams K, Timmis A, et al. Prognosis research strategy (PROGRESS) 1: a framework for researching clinical outcomes. *BMJ*. 2013 Feb 5;346:e5595. <https://doi.org/10.1136/bmj.e5595>
7. Riley RD, Hayden JA, Steyerberg EW, Moons KG, Abrams K, Kyzas PA, et al. Prognosis Research Strategy (PROGRESS) 2: prognostic factor research. *PLoS Med*. 2013;10(2):e1001380. <https://doi.org/10.1371/journal.pmed.1001380>
8. Steyerberg EW, Moons KG, van der Windt DA, Hayden JA, Perel P, Schroter S, et al. Prognosis Research Strategy (PROGRESS) 3: prognostic model research. *PLoS Med*. 2013;10(2):e1001381. <https://doi.org/10.1371/journal.pmed.1001381>
9. Hingorani AD, Windt DA, Riley RD, Abrams K, Moons KG, Steyerberg EW, et al. Prognosis research strategy (PROGRESS) 4: stratified medicine research. *BMJ*. 2013 Feb 5;346:e5793. <https://doi.org/10.1136/bmj.e5793>

## Randomized Trials: Reading list

Schulz, K. F., & Grimes, D. A. (2002). Generation of allocation sequences in randomised trials: chance, not choice. *The Lancet*, 359(9305), 515-519.

<http://www.ais.up.ac.za/med/tnm800/EssentialTNM800/DayTwo/InterventionResearch/Rxallocation.pdf>

Schulz, K. F., & Grimes, D. A. (2002). Allocation concealment in randomised trials: defending against deciphering. *The Lancet*, 359(9306), 614-618.

<http://chrims.ca/wp-content/uploads/2014/08/11-Allocation-concealment-in-randomised-trials-defending-against-deciphering.pdf>

Haynes, R. B. (2000). Incorporating allocation concealment and blinding in randomised controlled trials. *Evidence-Based Medicine*, 5(2), 38-38.

<http://ebm.bmj.com/content/ebmed/5/2/38.1.full.pdf>

Chalmers, I. (2001). Comparing like with like: some historical milestones in the evolution of methods to create unbiased comparison groups in therapeutic experiments. *International Journal of Epidemiology*, 30(5), 1156-1164.

<https://pdfs.semanticscholar.org/1b2c/634211d5f648a3cacaec3c495cf520a5742e.pdf>

Bang, H., Flaherty, S. P., Kolahi, J., & Park, J. (2010). Blinding assessment in clinical trials: a review of statistical methods and a proposal of blinding assessment protocol. *Clinical Research and Regulatory Affairs*, 27(2), 42-51.

[https://www.researchgate.net/profile/Jafar\\_Kolahi/publication/232046739\\_Blinding\\_assessment\\_in\\_clinical\\_trials\\_A\\_review\\_of\\_statistical\\_methods\\_and\\_a\\_proposal\\_of\\_blinding\\_assessment\\_protocol/links/09e4150b8c2e0719d4000000.pdf](https://www.researchgate.net/profile/Jafar_Kolahi/publication/232046739_Blinding_assessment_in_clinical_trials_A_review_of_statistical_methods_and_a_proposal_of_blinding_assessment_protocol/links/09e4150b8c2e0719d4000000.pdf)

Hey, S. P., & Truog, R. D. (2015). The question of clinical equipoise and patients' best interests. *AMA journal of ethics*, 17(12), 1108.

<http://journalofethics.ama-assn.org/2015/12/ecas1-1512.html>

Thorpe, K. E., Zwarenstein, M., Oxman, A. D., Treweek, S., Furberg, C. D., Altman, D. G., ... & Chalkidou, K. (2009). A pragmatic-explanatory continuum indicator summary (PRECIS): a tool to help trial designers. *Journal of clinical epidemiology*, 62(5), 464-475.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2679824/>

Lesaffre, E. (2008). Superiority, equivalence, and non-inferiority trials. *Bulletin of the NYU hospital for joint diseases*, 66(2), 150-154.

<http://hjdbulletin.org/files/archive/pdfs/431.pdf>

Mascha, E. J. (2010). Equivalence and noninferiority testing in anesthesiology research. *The Journal of the American Society of Anesthesiologists*, 113(4), 779-781.

<http://anesthesiology.pubs.asahq.org/article.aspx?articleid=1933452>

Lillie, E. O., Patay, B., Diamant, J., Issell, B., Topol, E. J., & Schork, N. J. (2011). The n-of-1 clinical trial: the ultimate strategy for individualizing medicine?. *Personalized medicine*, 8(2),

161-173.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3118090/>

Scuffham, P. A., Nikles, J., Mitchell, G. K., Yelland, M. J., Vine, N., Poulos, C. J., ... & Glasziou, P. (2010). Using N-of-1 trials to improve patient management and save costs. *Journal of general internal medicine*, 25(9), 906-913.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2917656/>

Schulz, K. F., & Grimes, D. A. (2002). Blinding in randomised trials: hiding who got what. *The Lancet*, 359(9307), 696-700.

[http://www.unav.edu/departamento/preventiva/files/file/preventiva/blinding%20in%20clinical%20trials\\_Schulz%20Lancet%2004.pdf](http://www.unav.edu/departamento/preventiva/files/file/preventiva/blinding%20in%20clinical%20trials_Schulz%20Lancet%2004.pdf)

Higgins, J. P., Altman, D. G., Gøtzsche, P. C., Jüni, P., Moher, D., Oxman, A. D., ... & Sterne, J. A. (2011). The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. *Bmj*, 343, d5928.

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Jørgensen, L., Paludan-Müller, A. S., Laursen, D. R., Savović, J., Boutron, I., Sterne, J. A., ... & Hróbjartsson, A. (2016). Evaluation of the Cochrane tool for assessing risk of bias in randomized clinical trials: overview of published comments and analysis of user practice in Cochrane and non-Cochrane reviews. *Systematic reviews*, 5(1), 80.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4862216/>

Frieden, T. R. (2017). Evidence for Health Decision Making—Beyond Randomized, Controlled Trials. *New England Journal of Medicine*, 377(5), 465-475.

[http://www.nejm.org/doi/full/10.1056/NEJMra1614394?query=featured\\_clinical-trials](http://www.nejm.org/doi/full/10.1056/NEJMra1614394?query=featured_clinical-trials)