

Appendix 4: Quality assessment of non-randomized studies [posted as supplied by author]

Study	Comparison of each intervention occurred		Method used to form intervention groups	Retrospective (R) or prospective (P) study design	Confounding considered in the study design or analysis	Did the study have a protocol?*	Outcome of acute rejection			Outcome of drug levels/bioequivalence		
	Between two or more groups of participants	Within the same group of participants over time					Pre-specified objective	Measured	Analyzed**	Pre-specified objective	Measured	Analyzed
Al Wakeel 2008 ³²	N	Y	Action of researchers	P	N	Y	N	N	N	Y	Y	Y
Al Wakeel 2008 ³¹	N	Y	Action of researchers	P	N	Y	Y	Y	N	Y	Y	Y
Sayyah, 2007 ⁴⁹	N	Y	Action of researchers	P	N	Probably yes	N	N	N	Y	Y	Y
Masri, 2005 ⁴⁴		Y	Action of researchers	P	N	Probably yes	N	N	N	Y	Y	Y
Fradette, 2005 ³⁷	N	Y	Action of researchers	P	Y Multivariable regression	Probably yes	N	N	N	Y	Y	Y
Perlik, 2005 ⁴⁶	N	Y	Action of researchers	P	N	Y	N	N	N	Y	Y	Y
Talaulikar, 2004 ⁵⁴	N	Y	Action of researchers	P	N	Y	N	N	N	Y	Y	Y
Masri, 2004 ⁴³	N	Y	Action of researchers	P	N	Y	N	N	N	Y	Y	Y
Durlik, 2003 ³⁶	N	Y	Action of researchers	P	N	Y	N	N	N	Y	Y	Y
Tsang, 2003 ⁵⁶	N	Y	Action of researchers	P	N	Probably yes	Y	Y	N	Y	Y	Y
Roza, 2002 ⁴⁸	N	Y	Action of researchers	P	N	Y	Y	Y	N	Y	Y	Y
Gaston, 1999 ⁶⁰	N	Y	Action of researchers	P	N	Probably yes	Y	Y	N	Y	Y	Y
Pamugas, 2012 ⁴⁵	Y	N	Unclear	P	Y Matching on age, sex, primary renal disease, number of DR mismatches	Probably yes	Y	Y	N	Y	Y	Y
Diarra 2010 ³⁵	N	Y	Healthcare decision makers and participant preferences	Unclear	N	Probably no	N	N	N	Y	Y	Y
Kahn, 2010 Incident transplants sub-study ³⁹	Y	N	Time differences and healthcare	R	N	Probably yes	N	Y	N	Y	Y	Y

			decision makers									
Kahn, 2010 Prevalent transplants sub- study ³⁹	N	Y	Time differences and healthcare decision makers	R	N	Probably yes	N	Y	N	Y	Y	Y
Spasovski, 2008 ⁵¹	Y	N	Time differences	R	Y Matching on age, gender and body weight	Probably no	Y	Y	Y	Y	Y	Y
Sharma, 2006 ⁵⁰	Y	N	Unclear	P	Y Matching on age and sex No differences in other key baseline characteristics	Probably no	Y	Y	Y	Y	Y	Y
Taber, 2005 ⁵³	Y	N	Time differences	R	Y No differences in baseline characteristics	Y	Y	Y	Y	N	N	N
Carnahan, 2003 ³³	N	Y	Healthcare decision makers (Medical centre formulary changes)	P	N	Probably yes	Y	Y	N	Y	Y	Y
Kraeuter, 2013 ⁴¹	N	Y	Participant preferences	R	N	Probably yes	Y	Y	Y	Y	Y	Y
Rosenborg, 2014 ⁶⁹	N	Y	Healthcare decision makers	P	Y To account for dose adjustments drug levels were normalized for dose	Probably yes	Y	Y	N	Y	Y	Y
Mcdevitt-Potter, 2011 ⁷²	N	Y	Healthcare decision makers, location differences and participant preferences	P	N	Probably yes	Y	Y	N	Y	Y	Y
Heavner, 2013 ⁶⁶	Y	N	Time differences	Unclear	N	Y	Y	Y	N	Y	Y	Y
Marfo, 2013 ⁶⁷	Y	Y	Retail pharmacy switch	R	N	Y	Y	Y	N	Y	Y	Y
Connor, 2012 ⁶⁴	Y	N	Healthcare decision	R	Y Matching on	Probably no	Y	Y	Y	Y	Y	Y

			makers and time differences (program switch due to cost)		immunosuppression and deceased vs living donor							
Momper, 2011 ⁷³	N	Y	Unclear	R	Y Multivariable regression	Probably yes	Y	Y	N	Y	Y	Y
Spence, 2012 ⁷⁰	N	Y	Healthcare decision makers	R	N	Y	Y	Y	N	Y	Y	Y
Yu, 2012 ⁷¹	Y	N	Time and location differences (historical controls)	P (generic group) R (brand name group)	Y Matching on age, disease type, gender, liver disease severity, graft to recipient weight ratio	Probably yes	Y	Y	Y	Y	Y	Y
Dhungel, 2013 ⁶⁵	Y	N	Time differences (historical controls)	R	N	Probably no	Y	Y	Y	Y	Y	Y
Videla, 2007 ⁸⁰	N	Y	Action of researchers	P	N	Probably yes	N	N	N	Y	Y	Y
Danguilan, 2014 ⁷⁹	Y	N	Time differences (historical controls)	P (generic group) R (brand name group)	Y Matching on age, gender, PRA and HLA typing	Probably yes	Y	Y	Y	Y	Y	Y
Rutkowski, 2011 ⁷⁷	Y	N	Unclear	Unclear	Y Matched based on donor (partner kidneys)	Probably no	Y	Y	Y	Y	Y	N
Namgoong, 2013 ⁷⁶	N	Y	Healthcare decision makers and time differences (program was switching from trade name to generic)	P	N	Probably yes	Y	Y	N	Y	Y	Y

*Did the study have a protocol? An answer of probably yes was given if the methods specified that the study received REB or IRB approval or if the study was interventional, but it was not specifically stated that the study had a protocol. An answer of probably no was given if there was no specific statement about REB/IRB approval or a protocol and the study was observational.

**The outcome of acute rejection was often not analyzed due to a lack of events.