Cortellis clinical trial database trial summary statistic tables and figures

July 24, 2017

Table 1: Number of trials receiving NIH funding by presence of biomarker

	No funding	NIH funding	Total
No biomarker	85,657	1,840	87,497
Biomarker	57,295	2,198	59,493
$\operatorname{Tot} \operatorname{al}$	142952	4,038	146990

Table 2: Number of trials receiving NIH funding by presence of biomarker and location

	(1)	(2)	(3)
	All Trials	US Trials	Non-US Trials
Number of trials receiving funding			
No biomarker	1840	1691	50
	(42.4)	(39.9)	(7.1)
Biomarker	2198	2053	64
	(46.0)	(43.4)	(8.0)
Percent of trials receiving funding			
No biomarker	2.1	6.0	0.1
	(0.05)	(0.14)	(0.02)
Biomarker	3.7	8.5	0.2
	(0.08)	(0.18)	(0.03)
Observations	146990	52601	69857

Table 3: Number of trials receiving NIH funding by presence of biomarker and phase

	(1)	(2)	(3)	(4)
	All Trials	Phase I	Phase II	Phase III
Number of trials receiving funding				
No biomarker	1840	647	976	217
	(42.4)	(25.2)	(30.8)	(14.6)
Biomarker	2198	880	1157	161
	(46.0)	(28.9)	(33.3)	(12.6)
				D
Percent of trials receiving funding				
No biomarker	2.1	2.0	2.7	1.1
	(0.05)	(0.08)	(0.08)	(0.07)
Biomarker	3.7	4.9	4.2	1.2
	(0.08)	(0.16)	(0.12)	(0.09)
Observations	146990	49487	64155	33348

Table 4: Percent of trials receiving NIH funding by biomarker role

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Trials	No Biomarker	Biomarker present	Disease	Therapeutic effect	Toxic effect	Role not determ
Percent receiving funding	2.7	2.1	3.7	5.8	3.7	2.1	3.3
	(0.0)	(0.0)	(0.1)	(0.2)	(0.1)	(0.2)	(0.9)
Observations	146990	87497	59493	12235	48973	7043	359

Standard errors in parentheses

Trials may employ multiple biomarkers with one or more biomarker roles.

Table 5: Trials by Phase

	Trial count	Percent of all Phase I-III
Phase 1 Clinical	35,931	24.4
Phase 1/Phase 2 Clinical	$11,\!514$	7.8
Phase 1a Clinical	336	0.2
Phase 1b Clinical	1,706	1.2
Phase 2 Clinical	54,724	37.2
Phase 2/Phase 3 Clinical	$5,\!699$	3.9
Phase 2a Clinical	$2{,}143$	1.5
Phase 2b Clinical	1,589	1.1
Phase 3 Clinical	32,042	21.8
Phase 3a Clinical	125	0.1
Phase 3b Clinical	1,181	0.8
Total	146990	100.0

Table 6: Average trial duration in months

End year	Duration (months)	# of trials with nonmissing duration
2000	32.4	267
2001	36.8	350
2002	36.6	447
2003	32.5	709
2004	35.8	857
2005	34.2	$1{,}175$
2006	34.0	1,543
2007	34.3	2,046
2008	31.2	2,401
2009	32.9	2,615
2010	35.1	$2,\!651$
2011	36.5	2,761
2012	38.4	$2,\!898$
2013	40.2	2,763
2014	39.6	2,945
2015	41.8	2,798
2016	41.4	$3{,}098$
Observations	32324	

Table 7: Selected averages by NIH funding status

	All trials		No NIH funding		NIH funding	
	Average	Standard error	Average	Standard error	Average	Standard error
US trial	0.49	0.0017	0.47	0.0017	0.97	0.0031
Biomarker used	0.47	0.0017	0.47	0.0017	0.54	0.0092
Subjects enrolled	256.2	18.2	260.0	18.8	143.7	21.7
Duration	36.6	0.11	35.8	0.11	62.1	0.76

Table 8: Percent of trials receiving NIH funding by presence of biomarker: All trials

or triais	receiving iv	iii runding by p	resence or pro
	(1)	(2)	(3)
	All trials	No biomarker	$\operatorname{Biomarker}$
1995	3.8	3.5	5.7
1996	4.0	3.5	7.6
1997	5.8	5.4	8.3
1998	4.8	4.4	6.2
1999	4.9	4.4	6.9
2000	5.6	4.8	8.5
2001	4.7	3.9	7.8
2002	4.0	3.3	6.3
2003	3.9	3.4	5.2
2004	4.0	3.1	6.2
2005	3.9	2.8	6.3
2006	3.5	2.4	5.9
2007	2.8	1.8	4.7
2008	2.9	1.9	4.5
2009	2.8	1.9	4.1
2010	2.2	1.1	3.5
2011	1.9	1.0	2.9
2012	1.7	0.9	2.4
2013	2.2	1.8	2.6
2014	2.2	1.5	2.8
2015	2.2	1.3	2.9
2016	1.9	1.1	2.7

Table 9: Percent of trials receiving NIH funding by presence of biomarker: US trials

(1) (2) (3) All trials No biomarker Biomarker 1995 12.2 12.4 11.1 1996 9.8 10.0 9.2 1997 13.1 12.9 13.6 1998 10.7 10.9 10.1 1999 8.6 8.1 10.3 2000 12.7 12.1 14.3 2001 9.9 8.6 13.1 2002 9.1 8.4 10.6 2003 8.7 8.6 8.9 2004 8.8 7.3 11.8 2005 9.1 7.1 12.7 2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 <th>or triais</th> <th>receiving iv</th> <th>in runding by p</th> <th>resence or bro</th>	or triais	receiving iv	in runding by p	resence or bro
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1996 9.8 10.0 9.2 1997 13.1 12.9 13.6 1998 10.7 10.9 10.1 1999 8.6 8.1 10.3 2000 12.7 12.1 14.3 2001 9.9 8.6 13.1 2002 9.1 8.4 10.6 2003 8.7 8.6 8.9 2004 8.8 7.3 11.8 2005 9.1 7.1 12.7 2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8		All trials	No biomarker	$\operatorname{Biomarker}$
1997 13.1 12.9 13.6 1998 10.7 10.9 10.1 1999 8.6 8.1 10.3 2000 12.7 12.1 14.3 2001 9.9 8.6 13.1 2002 9.1 8.4 10.6 2003 8.7 8.6 8.9 2004 8.8 7.3 11.8 2005 9.1 7.1 12.7 2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	1995	12.2	12.4	11.1
1998 10.7 10.9 10.1 1999 8.6 8.1 10.3 2000 12.7 12.1 14.3 2001 9.9 8.6 13.1 2002 9.1 8.4 10.6 2003 8.7 8.6 8.9 2004 8.8 7.3 11.8 2005 9.1 7.1 12.7 2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	1996	9.8	10.0	9.2
1999 8.6 8.1 10.3 2000 12.7 12.1 14.3 2001 9.9 8.6 13.1 2002 9.1 8.4 10.6 2003 8.7 8.6 8.9 2004 8.8 7.3 11.8 2005 9.1 7.1 12.7 2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	1997	13.1	12.9	13.6
2000 12.7 12.1 14.3 2001 9.9 8.6 13.1 2002 9.1 8.4 10.6 2003 8.7 8.6 8.9 2004 8.8 7.3 11.8 2005 9.1 7.1 12.7 2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	1998	10.7	10.9	10.1
2001 9.9 8.6 13.1 2002 9.1 8.4 10.6 2003 8.7 8.6 8.9 2004 8.8 7.3 11.8 2005 9.1 7.1 12.7 2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	1999	8.6	8.1	10.3
2002 9.1 8.4 10.6 2003 8.7 8.6 8.9 2004 8.8 7.3 11.8 2005 9.1 7.1 12.7 2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2000	12.7	12.1	14.3
2003 8.7 8.6 8.9 2004 8.8 7.3 11.8 2005 9.1 7.1 12.7 2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2001	9.9	8.6	13.1
2004 8.8 7.3 11.8 2005 9.1 7.1 12.7 2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2002	9.1	8.4	10.6
2005 9.1 7.1 12.7 2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2003	8.7	8.6	8.9
2006 8.3 6.1 12.0 2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2004	8.8	7.3	11.8
2007 6.9 4.7 10.0 2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2005	9.1	7.1	12.7
2008 6.6 4.6 9.2 2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2006	8.3	6.1	12.0
2009 6.8 4.9 9.1 2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2007	6.9	4.7	10.0
2010 5.6 3.4 7.6 2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2008	6.6	4.6	9.2
2011 4.9 2.8 6.5 2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2009	6.8	4.9	9.1
2012 4.8 3.4 5.9 2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2010	5.6	3.4	7.6
2013 6.0 5.6 6.3 2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2011	4.9	2.8	6.5
2014 5.3 4.1 6.2 2015 5.8 3.7 7.1	2012	4.8	3.4	5.9
2015 5.8 3.7 7.1	2013	6.0	5.6	6.3
	2014	5.3	4.1	6.2
2016 6.0 3.9 7.6	2015	5.8	3.7	7.1
	2016	6.0	3.9	7.6

Table 10: Percent of trials receiving NIH funding by phase

	Phase I-III	Phase I	Phase II	Phase III	Number of trials
Start year					
main					
1995	3.8	2.1	6.0	3.3	866.0
1996	4.0	3.5	4.8	3.4	970.0
1997	5.8	5.6	8.0	3.0	1322.0
1998	4.8	5.3	6.0	1.9	1704.0
1999	4.9	4.1	6.9	2.9	2407.0
2000	5.6	7.3	6.1	2.6	2625.0
2001	4.7	4.7	5.7	3.3	2993.0
2002	4.0	3.9	5.0	2.5	3718.0
2003	3.9	5.1	4.1	2.1	4190.0
2004	4.0	4.1	5.8	1.2	5216.0
2005	3.9	4.3	4.9	1.6	6407.0
2006	3.5	4.0	4.7	1.0	7176.0
2007	2.8	3.2	3.7	0.7	7557.0
2008	2.9	3.3	3.6	0.9	8014.0
2009	2.8	3.5	3.2	0.8	8498.0
2010	2.2	2.7	2.5	0.8	8736.0
2011	1.9	2.0	2.4	0.7	8997.0
2012	1.7	2.1	2.0	0.2	9269.0
2013	2.2	2.7	2.8	0.3	9133.0
2014	2.2	3.1	2.3	0.5	9442.0
2015	2.2	2.6	2.5	0.8	10569.0
2016	1.9	2.7	1.9	0.6	12162.0











