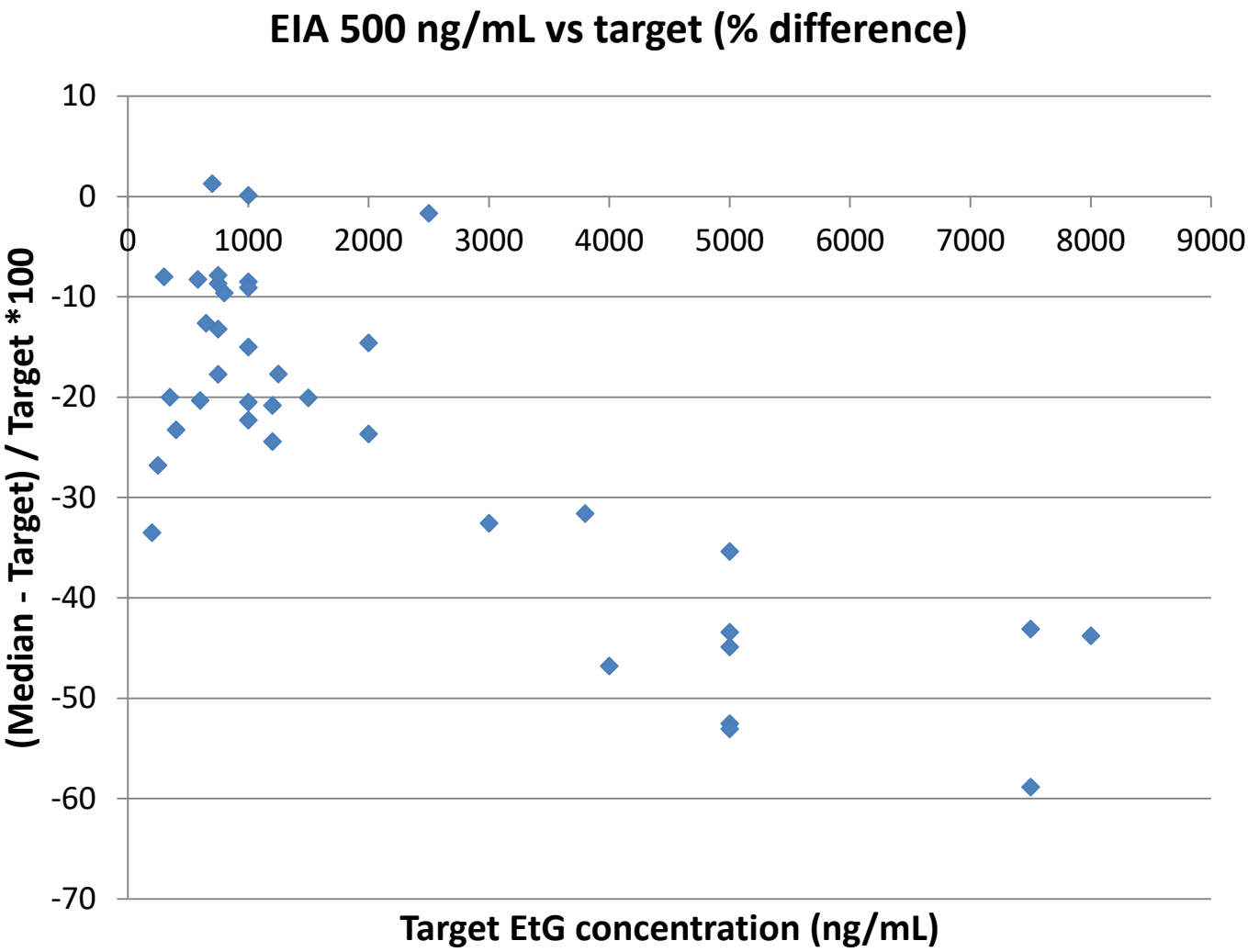
Supplemental Digital Content, containing one figure and one table. The Supplemental Digital Content was not copyedited by *Archives of Pathology & Laboratory Medicine*.



Supplementary Figure 1: Bland-Altman analysis of enzyme immunoassay (EIA) for challenges <10,000 ng/mL. Percent difference in median EIA values minus target ethyl glucuronide (EtG) is shown on the y axis, versus target EtG concentration on the x axis.

Supplementary Table 1: Inter-laboratory coefficients of variation (CVs).

Abbreviations: EtG, ethyl glucuronide; EtS, ethyl sulfate; EIA, enzyme immunoassay; MS, mass spectrometry
EIA/MS 500 and MS 100 groups refer to the 500 and 100 ng/mL cutoff peer groups, respectively.

	EtG Target	EIA 500	EIA all	EtG MS 500	EtG MS all	EtS Target	EtS MS 100	EtS MS all
2013-A1	1000	7.5	7.5	11.4	7.1	750	20.7	14.2
2013-A2	5000	35.2	51.5	14.5	8.8	2000	14.7	14.3
2013-A3	600	6.7	5.8	12.9	8.0	200	16.5	15.4
2013-B1	350	.	2.7	10.2	11.4	150	19.3	13.3
2013-B2	1200	1.9	3.7	10.4	9.2	550	17.4	16.0
2013-B3	3800	.	23.4	3.1	3.9	1000	11.4	14.8
2014-A1	8000	.	63.1	9.5	8.4	1200	13.1	10.9
2014-A2	150	34.6	6.1	26.9	19.5	150	15.9	14.0
2014-A3	580	2.6	2.8	11.3	9.9	350	12.3	10.7
2014-B1	2500	36.4	32.7	14.5	12.8	600	8.0	8.8
2014-B2	700	4.6	7.7	12.7	11.4	80	.	.
2014-B3	1000	3.0	5.1	11.4	10.7	3000	6.9	8.6
2015-A1	7500	42.6	48.2	9.9	9.4	2500	13.6	12.8
2015-A2	750	6.8	6.8	14.3	12.5	300	12.7	12.6
2015-A3	1000	4.7	4.9	12.1	11.1	1500	11.0	11.3
2015-B1	2000	24.2	18.6	10.2	10.3	750	8.8	15.6
2015-B2	0	.	.	.	.	2000	9.2	14.6
2015-B3	5000	43.9	41.0	11.1	12.1	1000	9.1	14.6
2016-A1	250	14.0	33.9	21.9	22.1	50	17.8	23.9
2016-A2	1000	9.3	8.0	14.6	14.8	1000	9.4	10.6
2016-A3	650	9.4	12.0	13.4	13.4	400	12.7	13.2
2016-B1	400	13.1	13.5	25.1	19.9	150	11.2	14.6
2016-B2	5000	20.0	20.8	11.1	11.9	1000	7.7	12.1
2016-B3	1000	10.4	9.9	15.2	15.2	300	8.6	13.4
2017-A1	3000	35.4	33.7	13.9	13.8	1000	10.1	12.8
2017-A2	800	7.8	8.8	15.4	14.0	200	11.3	15.0
2017-A3	300	16.0	17.4	22.2	18.3	0	.	.
2017-B1	200	17.1	16.1	17.5	19.9	1000	13.7	13.4
2017-B2	20000	52.5	49.7	26.9	23.9	1500	12.6	13.6
2017-B3	1200	9.3	9.4	16.2	16.9	800	12.2	13.7
2018-A1	1250	10.8	10.7	13.1	14.8	150	15.8	19.5
2018-A2	5000	42.8	39.0	14.3	14.9	1500	11.1	13.6
2018-A3	750	4.3	4.8	12.7	13.1	0	.	.
2018-B1	1500	12.0	12.0	15.7	15.9	250	13.4	15.4
2018-B2	7500	57.1	53.3	14.6	11.7	7500	9.8	14.4
2018-B3	0	.	.	.	.	500	10.1	13.9
2019-A1	2000	24.1	22.4	13.2	13.7	250	9.9	13.0
2019-A2	750	5.7	5.5	11.6	13.3	750	8.8	11.0
2019-A3	4000	41.2	37.7	11.0	12.6	0	.	.
2019-B1	1000	4.7	4.7	14.3	14.4	150	13.2	16.1
2019-B2	750	4.0	4.8	14.1	14.6	500	10.6	13.3
2019-B3	5000	33.4	31.0	11.1	13.9	1000	9.7	12.7

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