

## The Inter-laboratory Comparison Report

### The inter-laboratory studies

IFCC Ring Trials for Reference Laboratories are organized on behalf of the IFCC by the Reference Institute of Bioanalysis (RfB) of the German Society of Clinical Chemistry and Laboratory Medicine (DGKL). The reported results for RELA 2015, 2018, 2020 samples were retested with use of the remaining samples but not from the participation in RELA comparisons. When comparing our RMP results with those obtained with an established RMP via International Federation of Clinical Chemistry and Laboratory Medicine external quality assessment scheme for reference laboratories in laboratory medicine (RELA) samples, we found that the biases ranged from -2.76% to 1.89% against the target values.

Table 1. Results of aldosterone between the ID-LC-MS/MS procedure established by our laboratory and the different reference laboratories participated in IFCC-RELA for aldosterone assessment in 2015, 2018, 2020.

Sample	ID-LC-MS/MS <sup>a</sup> (nmol/L)	LC-MS/MS <sup>b</sup> (nmol/L)	Relative bias (%)
2015A	1.218	1.241	1.89
2015B	1.734	1.742	0.46
2018A	1.697	1.702	0.29
2018B	1.305	1.293	-0.92
2020A	0.254	0.247	-2.76
2020B	0.456	0.463	1.54

Note: <sup>a</sup>The results obtained from the ID-LC-MS/MS established by our laboratory; <sup>b</sup>The mean results obtained from the existing reference measurement procedure (ID-LC-MS/MS reference method for aldosterone used in the IFCC-RELA).