Outcome	S4 Study (1999-2001)	F4 Study (2006-2008)	FF4 Study (2013-2014)
Blood	Automatic device	Digital device	Digital device
Pressure	Type: HEM-705CP	Type: HEM-705CP (Fa. OMRON	Type: HEM-705CP
	(Fa. OMRON HEALTHCARE GmbH)	HEALTHCARE GmbH)	(Fa. OMRON HEALTHCARE GmbH)
Total	Enzymatic, photometric CHOL assay on a	Enzymatic, colorimetric CHOL Flex assay	Enzymatic, colorimetric CHOL Flex assay on a Dimension
Cholesterol	Hitachi 717 instrument (Roche Diagnostics	on a Dimension RxL instrument (Dade	Vista 1500 instrument (Siemens Healthcare Diagnostics
(serum)	GmbH, Mannheim, Germany).	Behring Inc., Newark, USA).	Inc., Newark, USA) or enzymatic, colorimetric CHOL2
			assay on a Cobas c701/702 instrument (Roche Diagnostics
			GmbH, Mannheim, Germany).
			For details please refer to footnote †
LDL	Determination of non-LDL Cholesterol by	Enzymatic, colorimetric ALDL Flex assay	Enzymatic, colorimetric LDLC Flex assay on a Dimension
Cholesterol	use of the enzymatic, photometric CHOL	on a Dimension RxL instrument (Dade	Vista 1500 instrument (Siemens Healthcare Diagnostics
(serum)	assay on a Hitachi 717 instrument (Roche	Behring Inc., Newark, USA).	Inc., Newark, USA) or enzymatic, colorimetric LDL_C
	Diagnostics GmbH, Mannheim, Germany)		assay on a Cobas c701/702 instrument (Roche Diagnostics
	after precipitation of LDL Cholesterol by		GmbH, Mannheim, Germany).
	QUANTOLIP reagents (Immuno AG,		For details please refer to footnote †
	Vienna, Austria). LDL Cholesterol is		
	calculated as the difference between Total		
HDL	and non-LDL Cholesterol.	Ensuration and an antication ALDI Flow account	Ensuration and aimstein UDLC Flam and a Dimension
Cholesterol	Enzymatic, photometric CHOL assay on a Hitachi 717 instrument after precipitation of	Enzymatic, colorimetric ALDL Flex assay on a Dimension RxL instrument (Dade	Enzymatic, colorimetric HDLC Flex assay on a Dimension Vista 1500 instrument (Siemens Healthcare Diagnostics
(serum)	non-HDL Cholesterol by HDL-C reagents	Behring Inc., Newark, USA).	Inc., Newark, USA) or enzymatic, colorimetric HDLC3
(set unit)	(Roche Diagnostics GmbH, Mannheim,	Denning me., Newark, USA).	assay on a Cobas c701/702 instrument (Roche Diagnostics
	Germany).		GmbH, Mannheim, Germany).
	Germany).		For details please refer to footnote †
Triglycerides	Enzymatic, colorimetric TG assay on a	Enzymatic, colorimetric TGL Flex assay	Enzymatic, colorimetric TRIG Flex assay on a Dimension
(serum)	Hitachi 917 instrument (Roche Diagnostics	on a Dimension RxL instrument (Dade	Vista 1500 instrument (Siemens Healthcare Diagnostics
(501 411)	GmbH, Mannheim, Germany).	Behring Inc., Newark, USA).	Inc., Newark, USA) or enzymatic, colorimetric TRIGL
	······································		assay on a Cobas c701/702 instrument (Roche Diagnostics
			GmbH, Mannheim, Germany).
			For details please refer to footnote †
HbA1c	Turbidimetric inhibition immunoassay Tina-	Cation-exchange high performance liquid	Cation-exchange high performance liquid
(hemolyzed	Quant HBA1C II on a Hitachi 717 instrument	chromatographic, photometric assay on an	chromatographic, photometric VARIANT II TURBO
whole blood)	(Roche Diagnostics GmbH, Mannheim,	Adams HA 8160 Hemoglobin Analysis	HbA1c Kit - 2.0 assay on a VARIANT II TURBO
	Germany)	System (Arkray Inc., distributed by A.	Hemoglobin Testing System (Bio-Rad Laboratories Inc.,
		Menarini Diagnostics, Florence, Italy)	Hercules, USA)

 $\dagger$  After about half of the study period, the KORA FF4 measurement instrument and assays changed from Siemens to Roche. Calibration formulas were developed using 122 KORA FF4 samples which were measured with both instruments / assays during the time of the method change. The Siemens measurement results were calibrated to correspond to the Roche measurements using the following formulas [all units in mg/dl]: Total\_Cholesterol\_Roche =  $3.00 + Total_Cholesterol_Siemens * 1.00$ ; HDL\_Cholesterol\_Roche =  $2.40 + HDL_Cholesterol_Siemens * 1.12$ ; LDL\_Cholesterol\_Roche = antilog (-0.13328 + log LDL\_Cholesterol\_Siemens \* 1.03051); Triglycerides\_Roche =  $4.97073 + Triglycerides_Siemens * 0.90732$ .