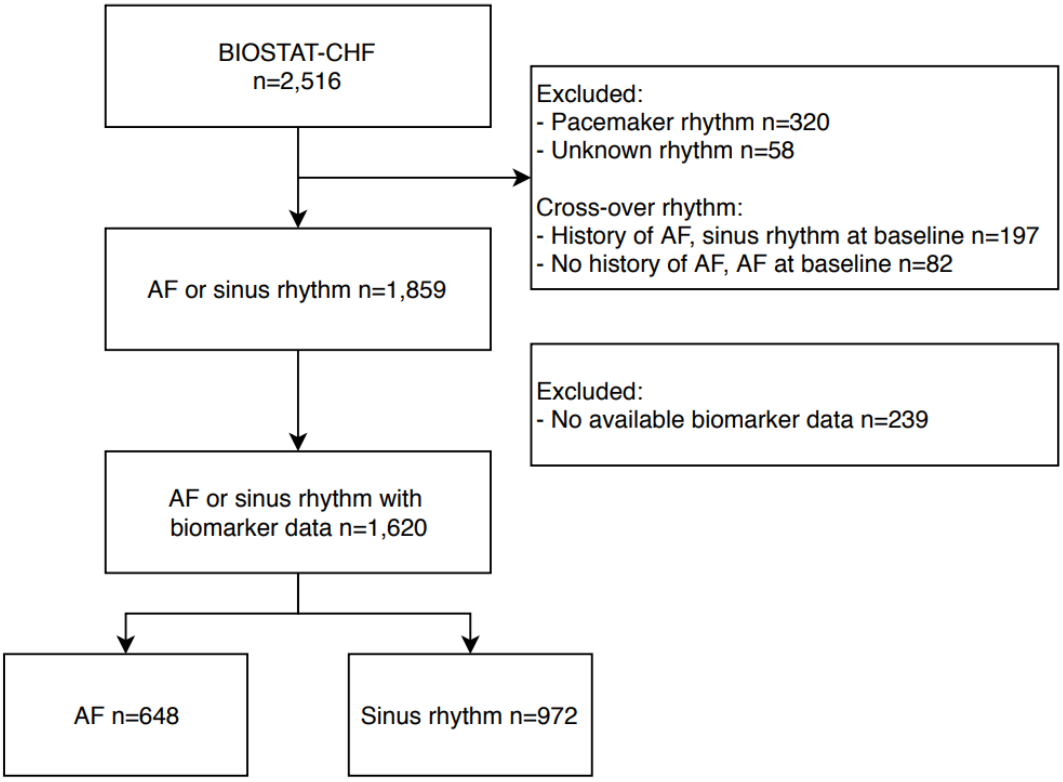
Supplemental Material

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Santema, BT, Artola Arita V, Sama IE et al. Pathophysiological Pathways in Patients with Heart Failure and Atrial Fibrillation.

TABLE OF CONTENTS

Supplementary Figure 1. Flow chart of selected patients.



Supplementary Figure 2. STROBE Statement

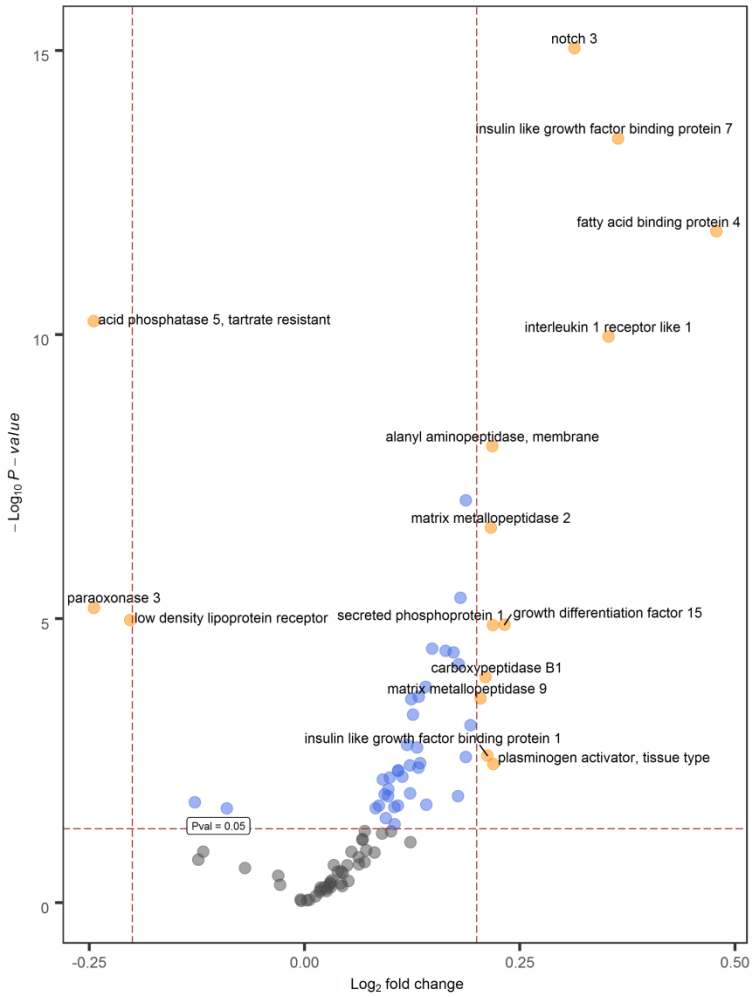
	Item No	Recommendation	Page No
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	2
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	4
Objectives	3	State specific objectives, including any prespecified hypotheses	4
Methods			
Study design	4	Present key elements of study design early in the paper	5
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	5
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up (*b*) For matched studies, give matching criteria and number of exposed and unexposed	5,6, suppl mate-ral
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	5, 6, 7
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	5, 6, 7
Bias	9	Describe any efforts to address potential sources of bias	5, 6, 7
Study size	10	Explain how the study size was arrived at	5, 6
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	6, 7
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding (*b*) Describe any methods used to examine subgroups and interactions (*c*) Explain how missing data were addressed (*d*) If applicable, explain how loss to follow-up was addressed (*e*) Describe any sensitivity analyses	6, 7 7 6 NA 7
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed (b) Give reasons for non-participation at each stage (c) Consider use of a flow diagram	7, suppl mate-rial
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	7, 8, 9, table 1 and

		(b) Indicate number of participants with missing data for each variable of interest	2 6
		(c) Summarise follow-up time (eg, average and total amount)	NA
Outcome data	15*	Report numbers of outcome events or summary measures over time	NA

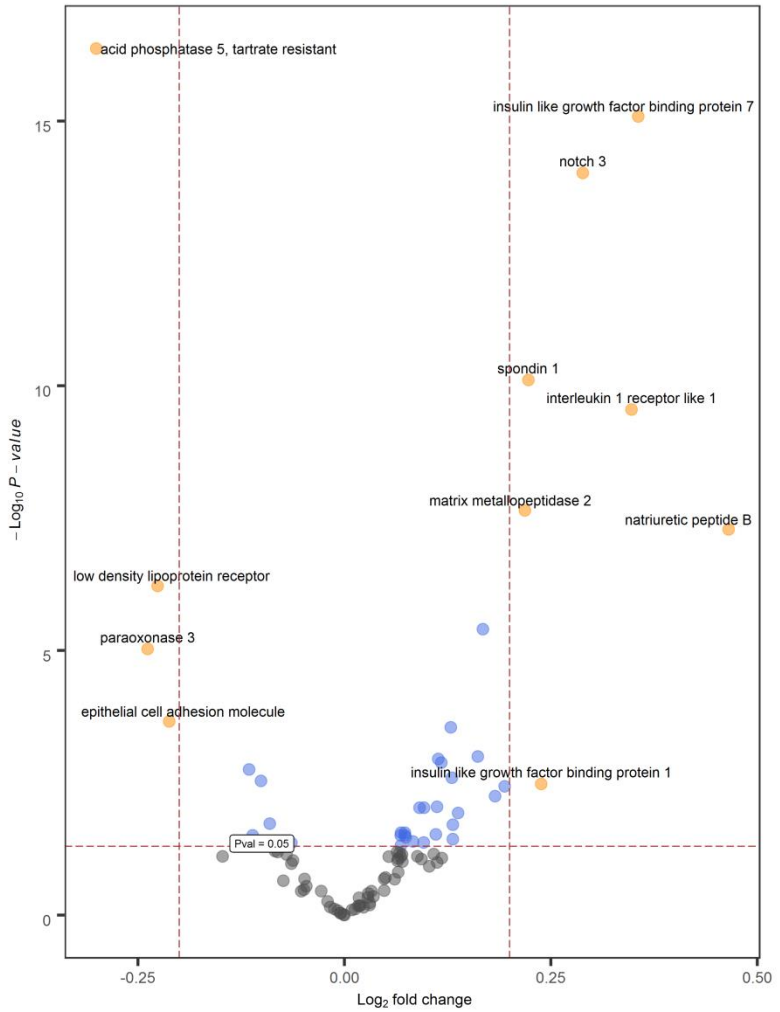
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	7, 8, 9, ,
		(*b*) Report category boundaries when continuous variables were categorized	table 1, 2 suppl mate- rial
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	NA
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	10
Discussion			
Key results	18	Summarise key results with reference to study objectives	10
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	13, 14
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	10, 11, 12, 13
Generalisability	21	Discuss the generalisability (external validity) of the study results	10,11,12, 13
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	15

Supplementary Figure 3. Volcano plots adjusted for age and sex.

A. Index cohort



B. Validation cohort



Supplementary Table 1. Overview of differential expression of 92 biomarkers in patients with atrial fibrillation compared with sinus rhythm in the index cohort.

Protein	logFC	AveExpr	t	P.Value	adj.P.Val	B	GeneID	Symbol	Description	Olink	Short	DE_hits
Q9UM47	0,383	3,18	10,25	6,40E-24	5,89E-22	43,36	4854	NOTCH3	notch 3	NPX_124_NOTCH_3	NOTCH3	upregulated
Q16270	0,406	3,69	8,91	1,35E-18	6,19E-17	31,28	3490	IGFBP7	insulin like growth factor binding protein 7	NPX_180_IGFBP_7	IGFBP-7	upregulated
Q01638	0,435	3,78	8,33	1,75E-16	5,35E-15	26,50	9173	IL1RL1	interleukin 1 receptor like 1	NPX_176_ST2	ST2	upregulated
P15090	0,525	5,28	7,86	7,17E-15	1,65E-13	22,85	2167	FABP4	fatty acid binding protein 4	NPX_129_FABP4	FABP4	upregulated
Q99988	0,405	4,91	7,72	1,97E-14	3,63E-13	21,86	9518	GDF15	growth differentiation factor 15	NPX_135_GDF_15	GDF-15	upregulated
P98160	0,277	6,40	7,22	7,67E-13	1,18E-11	18,28	3339	HSPG2	heparan sulfate proteoglycan 2	NPX_122_PLC	PLC	upregulated
Q9HCB6	0,240	1,71	7,15	1,33E-12	1,62E-11	17,74	10418	SPON1	spondin 1	NPX_139_SPON1	SPON1	upregulated
Q99727	0,299	4,45	7,14	1,40E-12	1,62E-11	17,69	7079	TIMP4	TIMP metallopeptidase inhibitor 4	NPX_125_TIMP4	TIMP4	upregulated
P08253	0,266	2,77	6,65	4,07E-11	4,16E-10	14,40	4313	MMP2	matrix metallopeptidase 2	NPX_156_MMP_2	MMP-2	upregulated
P10451	0,314	4,80	6,48	1,18E-10	1,08E-09	13,36	6696	SPP1	secreted phosphoprotein 1	NPX_163_OPN	OPN	upregulated
Q03405	0,247	4,07	6,42	1,80E-10	1,51E-09	12,95	5329	PLAUR	plasminogen activator, urokinase receptor	NPX_162_U_PAR	U-PAR	upregulated
P18065	0,300	7,61	6,40	2,00E-10	1,54E-09	12,85	3485	IGFBP2	insulin like growth factor binding protein 2	NPX_192_IGFBP_2	IGFBP-2	upregulated
P36222	0,381	5,62	6,27	4,58E-10	3,24E-09	12,04	1116	CHI3L1	chitinase 3 like 1	NPX_175_CHI3L1	CHI3L1	upregulated
P08833	0,398	4,60	5,75	1,08E-08	6,64E-08	8,97	3484	IGFBP1	insulin like growth factor binding protein 1	NPX_144_IGFBP_1	IGFBP-1	upregulated
Q07654	0,269	5,22	5,55	3,27E-08	1,77E-07	7,90	7033	TFF3	trefoil factor 3	NPX_112_TFF3	TFF3	upregulated
P02144	0,276	6,22	5,31	1,23E-07	5,93E-07	6,63	4151	MB	myoglobin	NPX_158_MB	MB	upregulated
P16860	0,353	3,02	5,04	5,22E-07	2,28E-06	5,23	4879	NPPB	natriuretic peptide B	NPX_195_NT_PRO_BNP	NTproBNP	upregulated
P04080	0,225	4,64	5,02	5,73E-07	2,29E-06	5,14	1476	CSTB	cystatin B	NPX_114_CSTB	CSTB	upregulated
P20333	0,212	4,35	4,66	3,45E-06	1,27E-05	3,42	7133	TNFRSF1B	TNF receptor superfamily member 1B	NPX_106_TNF_R2	TNF-R2	upregulated
P19438	0,213	4,96	4,53	6,28E-06	2,06E-05	2,85	7132	TNFRSF1A	TNF receptor superfamily member 1A	NPX_191_TNF_R1	TNF-R1	upregulated
P15086	0,225	3,37	4,34	1,52E-05	4,65E-05	2,01	1360	CPB1	carboxypeptidase B1	NPX_174_CPB1	CPB1	upregulated
P08254	0,217	6,70	4,22	2,56E-05	7,37E-05	1,51	4314	MMP3	matrix metallopeptidase 3	NPX_186_MMP_3	MMP-3	upregulated
P00750	0,294	5,03	4,08	4,76E-05	1,29E-04	0,93	5327	PLAT	plasminogen activator, tissue type	NPX_177_T_PA	t-PA	upregulated
P15085	0,206	3,69	3,78	1,64E-04	3,78E-04	-0,24	1357	CPA1	carboxypeptidase A1	NPX_166_CPA1	CPA1	upregulated
P13686	-0,199	4,31	-5,60	2,51E-08	1,44E-07	8,16	54	ACP5	acid phosphatase 5, tartrate resistant	NPX_148_TR_AP	TR-AP	no difference
O00300	0,195	2,64	5,37	8,88E-08	4,54E-07	6,94	4982	TNFRSF11B	TNF receptor superfamily member 11b	NPX_110_OPG	OPG	no difference
P36941	0,194	2,99	5,07	4,48E-07	2,06E-06	5,38	4055	LTBR	lymphotoxin beta receptor	NPX_123_LTBR	LTBR	no difference

P15144	0,182	4,24	5,03	5,45E-07	2,28E-06	5,19	290	ANPEP	alanyl aminopeptidase, membrane	NPX_153_AP_N	AP-N	no difference
P14778	0,179	5,84	4,93	9,13E-07	3,50E-06	4,69	3554	IL1R1	interleukin 1 receptor type 1	NPX_155_IL_1RT1	IL-1RT1	no difference
P02786	0,198	5,02	4,62	4,18E-06	1,48E-05	3,24	7037	TFRC	transferrin receptor	NPX_133_TR	TR	no difference
P07339	0,155	3,22	4,36	1,36E-05	4,32E-05	2,11	1509	CTSD	cathepsin D	NPX_164_CTSD	CTSD	no difference
P78324	0,152	2,92	4,25	2,24E-05	6,64E-05	1,64	140885	SIRPA	signal regulatory protein alpha	NPX_170_SHPS_1	SHPS-1	no difference
P28799	0,132	2,99	4,09	4,57E-05	1,27E-04	0,96	2896	GRN	granulin precursor	NPX_118_GRN	GRN	no difference
O95998	0,158	5,67	4,00	6,55E-05	1,72E-04	0,62	10068	IL18BP	interleukin 18 binding protein	NPX_182_IL_18BP	IL-18BP	no difference
Q86VB7	0,161	6,77	3,98	7,34E-05	1,88E-04	0,52	9332	CD163	CD163 molecule	NPX_116_CD163	CD163	no difference
O75594	0,170	6,55	3,93	9,01E-05	2,24E-04	0,32	8993	PGLYRP1	peptidoglycan recognition protein 1	NPX_165_PGLYRP 1	PGLYRP1	no difference
P00749	0,134	3,86	3,91	9,70E-05	2,35E-04	0,25	5328	PLAU	plasminogen activator, urokinase	NPX_173_UPA	uPA	no difference
P30530	0,140	7,07	3,82	1,37E-04	3,24E-04	-0,07	558	AXL	AXL receptor tyrosine kinase	NPX_154_AXL	AXL	no difference
O15467	0,164	5,34	3,73	2,00E-04	4,50E-04	-0,43	6360	CCL16	C-C motif chemokine ligand 16	NPX_196_CCL16	CCL16	no difference
Q9HD89	0,160	5,95	3,70	2,27E-04	4,96E-04	-0,54	56729	RETN	resistin	NPX_143_RETN	RETN	no difference
P02452	0,127	1,61	3,69	2,32E-04	4,97E-04	-0,56	1277	COL1A1	collagen type I alpha 1 chain	NPX_183_COL1A1	COL1A1	no difference
Q96PL1	0,194	2,18	3,68	2,43E-04	5,07E-04	-0,60	117156	SCGB3A2	secretoglobin family 3A member 2	NPX_178_SCGB3A 2	SCGB3A2	no difference
P13598	0,134	4,26	3,64	2,78E-04	5,69E-04	-0,73	3384	ICAM2	intercellular adhesion molecule 2	NPX_188_ICAM_2	ICAM-2	no difference
Q13740	0,114	4,11	3,54	4,06E-04	8,13E-04	-1,09	214	ALCAM	activated leukocyte cell adhesion molecule	NPX_111_ALCAM	ALCAM	no difference
P80370	0,170	4,18	3,49	4,88E-04	9,55E-04	-1,26	8788	DLK1	delta like non-canonical Notch ligand 1	NPX_138_DLK_1	DLK-1	no difference
P13500	0,123	2,26	3,45	5,76E-04	1,10E-03	-1,41	6347	CCL2	C-C motif chemokine ligand 2	NPX_115_MCP_1	MCP-1	no difference
P27930	0,116	4,02	3,40	6,91E-04	1,30E-03	-1,58	7850	IL1R2	interleukin 1 receptor type 2	NPX_169_IL_1RT2	IL-1RT2	no difference
Q16663	0,136	6,57	3,26	1,13E-03	2,08E-03	-2,03	6359	CCL15	C-C motif chemokine ligand 15	NPX_171_CCL15	CCL15	no difference
Q92956	0,141	4,20	3,24	1,21E-03	2,19E-03	-2,10	8764	TNFRSF14	TNF receptor superfamily member 14	NPX_101_ TNFRSF14	TNFRSF14	no difference
P33151	0,114	2,73	3,15	1,64E-03	2,87E-03	-2,38	1003	CDH5	cadherin 5	NPX_127_CDH5	CDH5	no difference
P54760	0,095	1,54	3,15	1,66E-03	2,87E-03	-2,38	2050	EPHB4	EPH receptor B4	NPX_108_EPHB4	EPHB4	no difference
Q9Y275	0,125	5,37	3,11	1,88E-03	3,20E-03	-2,50	10673	TNFSF13B	TNF superfamily member 13b	NPX_159_TNFSF13 B	TNFSF13B	no difference
P56470	0,123	3,00	2,98	2,92E-03	4,89E-03	-2,90	3960	LGALS4	galectin 4	NPX_168_GAL_4	Gal-4	no difference

P19957	0,126	3,26	2,92	3,51E-03	5,77E-03	-3,07	5266	PI3	peptidase inhibitor 3	NPX_151_PI3	PI3	no difference
P24158	0,122	4,00	2,90	3,83E-03	6,18E-03	-3,15	5657	PRTN3	proteinase 3	NPX_160_PRTN3	PRTN3	no difference
Q12860	0,099	1,85	2,88	4,02E-03	6,38E-03	-3,19	1272	CNTN1	contactin 1	NPX_126_CNTN1	CNTN1	no difference
Q9NPY3	0,097	8,86	2,78	5,54E-03	8,65E-03	-3,48	22918	CD93	CD93 molecule	NPX_181_CD93	CD93	no difference
Q9UBR2	0,097	4,15	2,69	7,15E-03	1,10E-02	-3,71	1522	CTSZ	cathepsin Z	NPX_185_CTSZ	CTSZ	no difference
P25445	0,098	4,15	2,66	7,87E-03	1,17E-02	-3,80	355	FAS	Fas cell surface death receptor	NPX_157_FAS	FAS	no difference
Q9H2A7	0,090	5,51	2,63	8,59E-03	1,25E-02	-3,87	58191	CXCL16	C-X-C motif chemokine ligand 16	NPX_141_CXCL16	CXCL16	no difference
O14798	0,096	5,24	2,45	1,45E-02	2,08E-02	-4,34	8794	TNFRSF10C	TNF receptor superfamily member 10c	NPX_134_TNFRSF10C	TNFRSF10C	no difference
P04275	0,167	6,07	2,44	1,50E-02	2,12E-02	-4,37	7450	VWF	von Willebrand factor	NPX_193_VWF	vWF	no difference
P14780	0,131	3,10	2,43	1,54E-02	2,14E-02	-4,39	4318	MMP9	matrix metallopeptidase 9	NPX_107_MMP_9	MMP-9	no difference
P01589	0,104	3,67	2,39	1,68E-02	2,31E-02	-4,47	3559	IL2RA	interleukin 2 receptor subunit alpha	NPX_109_IL2_RA	IL2-RA	no difference
P16422	-0,122	2,90	-2,39	1,71E-02	2,31E-02	-4,48	4072	EPCAM	epithelial cell adhesion molecule	NPX_152_EP_CAM	Ep-Cam	no difference
P10646	-0,084	7,70	-2,23	2,56E-02	3,41E-02	-4,83	7035	TFPI	tissue factor pathway inhibitor	NPX_130_TFPI	TFPI	no difference
Q96F46	0,081	3,24	2,21	2,76E-02	3,62E-02	-4,90	23765	IL17RA	interleukin 17 receptor A	NPX_105_IL_17RA	IL-17RA	no difference
Q13867	0,076	4,52	2,20	2,83E-02	3,67E-02	-4,92	642	BLMH	bleomycin hydrolase	NPX_121_BLM_HYDROLASE	BLM HL	no difference
Q9NQ76	0,078	2,20	2,13	3,34E-02	4,27E-02	-5,06	56955	MEPE	matrix extracellular phosphoglycoprotein	NPX_120_MEPE	MEPE	no difference
P05164	0,073	3,51	2,01	4,48E-02	5,65E-02	-5,31	4353	MPO	myeloperoxidase	NPX_140_MPO	MPO	no difference
P16581	0,078	1,50	1,98	4,75E-02	5,91E-02	-5,36	6401	SELE	selectin E	NPX_136_SELE	SELE	no difference
P16109	-0,112	8,23	-1,97	4,95E-02	6,07E-02	-5,39	6403	SELP	selectin P	NPX_113_SELP	SELP	no difference
P17931	0,068	4,42	1,85	6,49E-02	7,85E-02	-5,62	3958	LGALS3	galectin 3	NPX_117_GAL_3	Gal-3	no difference
P05107	0,068	4,40	1,80	7,23E-02	8,64E-02	-5,71	3689	ITGB2	integrin subunit beta 2	NPX_103_ITGB2	ITGB2	no difference
P35247	0,072	2,11	1,76	7,82E-02	9,22E-02	-5,77	6441	SFTPD	surfactant protein D	NPX_150_PSP_D	PSP-D	no difference
Q92876	0,041	2,73	1,64	1,01E-01	1,17E-01	-5,97	5653	KLK6	kallikrein related peptidase 6	NPX_189_KLK6	KLK6	no difference
P20160	0,080	2,15	1,64	1,02E-01	1,17E-01	-5,98	566	AZU1	azurocidin 1	NPX_137_AZU1	AZU1	no difference
Q13231	0,102	2,17	1,35	1,79E-01	2,03E-01	-6,41	1118	CHIT1	chitinase 1	NPX_145_CHIT1	CHIT1	no difference
P04085	-0,064	1,87	-1,05	2,94E-01	3,30E-01	-6,77	5154	PDGFA	platelet derived growth factor subunit A	NPX_190_PDGF_SUBUNIT_A	PDGFsA	no difference
P08887	0,035	10,08	1,04	3,01E-01	3,33E-01	-6,78	3570	IL6R	interleukin 6 receptor	NPX_142_IL_6RA	IL6-RA	no difference
P16284	0,051	4,30	1,00	3,19E-01	3,49E-01	-6,82	5175	PECAM1	platelet and endothelial cell adhesion molecule 1	NPX_194_PECAM_1	PECAM-1	no difference
P05121	0,045	4,92	0,74	4,59E-01	4,96E-01	-7,04	5054	SERPINE1	serpin family E member 1	NPX_131_PAI	PAI	no difference
O00626	-0,032	1,58	-0,63	5,27E-01	5,64E-01	-7,12	6367	CCL22	C-C motif chemokine ligand 22	NPX_149_CCL22	CCL22	no difference

O00175	0,032	4,84	0,60	5,52E-01	5,84E-01	-7,14	6369	CCL24	C-C motif chemokine ligand 24	NPX_132_CCL24	CCL24	no difference
Q8NBP7	-0,017	1,84	-0,56	5,74E-01	6,00E-01	-7,16	255738	PCSK9	proprotein convertase subtilisin/kexin type 9	NPX_161_PCSK9	PCSK9	no difference
Q99969	-0,013	10,97	-0,43	6,68E-01	6,91E-01	-7,22	5919	RARRES2	retinoic acid receptor responder 2	NPX_187_RARRES 2	RARRES2	no difference
Q9Y624	0,020	4,66	0,32	7,50E-01	7,66E-01	-7,26	50848	F11R	F11 receptor	NPX_167_JAM_A	JAM-A	no difference
P00533	-0,004	0,59	-0,15	8,83E-01	8,93E-01	-7,30	1956	EGFR	epidermal growth factor receptor	NPX_179_EGFR	EGFR	no difference
Q5T2D2	0,002	3,49	0,04	9,69E-01	9,69E-01	-7,31	79865	TREML2	triggering receptor expressed on myeloid cells like 2	NPX_128_TLT_2	TLT-2	no difference
P01130	-0,269	3,03	-6,07	1,54E-09	1,01E-08	10,86	3949	LDLR	low density lipoprotein receptor	NPX_102_LDL_ RECEPTOR	LDL	downregulated
Q15166	-0,236	4,23	-4,57	5,28E-06	1,80E-05	3,01	5446	PON3	paraoxonase 3	NPX_184_PON3	PON3	downregulated
P42574	-0,234	6,77	-2,67	7,57E-03	1,14E-02	-3,76	836	CASP3	caspase 3	NPX_172_CASP_3	CASP-3	downregulated

Supplementary Table 2. Overview of differential expression of 92 biomarkers in patients with atrial fibrillation compared with sinus rhythm in the validation cohort.

Protein	logFC	AveExpr	t	P.Value	adj.P.Val	B	GeneID	Symbol	Description	Olink	Short	DE_hits
Q16270	0,379	4,19	8,79	5,13E-18	4,43E-16	30,07	3490	IGFBP7	insulin like growth factor binding protein 7	NPX_180_IGFBP_7	IGFBP-7	upregulated
Q9UM47	0,320	3,76	8,66	1,44E-17	4,43E-16	29,05	4854	NOTCH3	notch 3	NPX_124_NOTCH_3	NOTCH3	upregulated
Q9HCB6	0,242	2,12	7,17	1,29E-12	2,97E-11	17,89	10418	SPON1	spondin 1	NPX_139_SPON1	SPON1	upregulated
Q01638	0,386	4,28	7,12	1,87E-12	3,44E-11	17,53	9173	IL1RL1	interleukin 1 receptor like 1	NPX_176_ST2	ST2	upregulated
P16860	0,579	3,07	6,67	3,78E-11	5,79E-10	14,60	4879	NPPB	natriuretic peptide B	NPX_195_NT_PRO_ BNP	NTproBNP	upregulated
P08253	0,235	3,34	6,12	1,25E-09	1,44E-08	11,19	4313	MMP2	matrix metallopeptidase 2	NPX_156_MMP_2	MMP-2	upregulated
P08833	0,333	4,60	4,00	6,68E-05	6,15E-04	0,75	3484	IGFBP1	insulin like growth factor binding protein 1	NPX_144_IGFBP_1	IGFBP-1	upregulated
Q99988	0,216	5,48	3,89	1,08E-04	7,62E-04	0,30	9518	GDF15	growth differentiation factor 15	NPX_135_GDF_15	GDF-15	upregulated
P15144	0,142	4,64	3,93	8,93E-05	6,85E-04	0,48	290	ANPEP	alanyl aminopeptidase, membrane	NPX_153_AP_N	AP-N	no difference
P16284	0,121	4,50	3,45	5,70E-04	3,75E-03	-1,25	5175	PECAM1	platelet and endothelial cell adhesion molecule 1	NPX_194_PECAM_1	PECAM-1	no difference
P02786	0,165	5,10	3,39	7,13E-04	4,37E-03	-1,46	7037	TFRC	transferrin receptor	NPX_133_TR	TR	no difference
P02452	0,119	2,07	3,32	9,31E-04	5,35E-03	-1,71	1277	COL1A1	collagen type I alpha 1 chain	NPX_183_COL1A1	COL1A1	no difference
P10646	-0,120	8,01	-3,29	1,02E-03	5,49E-03	-1,79	7035	TFPI	tissue factor pathway inhibitor	NPX_130_TFPI	TFPI	no difference
O00300	0,115	3,18	3,24	1,21E-03	6,19E-03	-1,95	4982	TNFRSF11B	TNF receptor superfamily member 11b	NPX_110_OPG	OPG	no difference
P33151	0,110	3,38	3,21	1,38E-03	6,37E-03	-2,07	1003	CDH5	cadherin 5	NPX_127_CDH5	CDH5	no difference
P18065	0,168	8,07	3,21	1,38E-03	6,37E-03	-2,07	3485	IGFBP2	insulin like growth factor binding protein 2	NPX_192_IGFBP_2	IGFBP-2	no difference
P14778	0,110	6,41	3,18	1,52E-03	6,68E-03	-2,16	3554	IL1R1	interleukin 1 receptor type 1	NPX_155_IL_1RT1	IL-1RT1	no difference
P04275	0,201	6,03	3,09	2,07E-03	8,65E-03	-2,44	7450	VWF	von Willebrand factor	NPX_193_VWF	vWF	no difference
P10451	0,129	5,35	2,73	6,35E-03	2,43E-02	-3,45	6696	SPP1	secreted phosphoprotein 1	NPX_163_OPN	OPN	no difference
P35247	0,138	2,63	2,73	6,35E-03	2,43E-02	-3,46	6441	SFTPD	surfactant protein D	NPX_150_PSP_D	PSP-D	no difference
P98160	0,105	6,90	2,72	6,71E-03	2,47E-02	-3,50	3339	HSPG2	heparan sulfate proteoglycan 2	NPX_122_PLC	PLC	no difference
P13500	0,087	2,79	2,66	7,98E-03	2,82E-02	-3,66	6347	CCL2	C-C motif chemokine ligand 2	NPX_115_MCP_1	MCP-1	no difference
Q99727	0,102	4,95	2,57	1,04E-02	3,54E-02	-3,89	7079	TIMP4	TIMP metallopeptidase	NPX_125_TIMP4	TIMP4	no difference

									inhibitor 4			
Q96PL1	0,176	2,98	2,52	1,19E-02	3,91E-02	-4,01	117156	SCGB3A2	secretoglobin family 3A member 2	NPX_178_SCGB3A2	SCGB3A2	no difference
Q03405	0,096	4,62	2,47	1,38E-02	4,37E-02	-4,14	5329	PLAUR	plasminogen activator, urokinase receptor	NPX_162_U_PAR	U-PAR	no difference
P00749	0,089	4,40	2,45	1,46E-02	4,46E-02	-4,19	5328	PLAU	plasminogen activator, urokinase	NPX_173_UPA	uPA	no difference
P08254	0,128	7,42	2,43	1,54E-02	4,56E-02	-4,24	4314	MMP3	matrix metallopeptidase 3	NPX_186_MMP_3	MMP-3	no difference
Q92876	-0,080	3,22	-2,38	1,74E-02	5,01E-02	-4,35	5653	KLK6	kallikrein related peptidase 6	NPX_189_KLK6	KLK6	no difference
Q96F46	0,081	3,71	2,34	1,94E-02	5,34E-02	-4,44	23765	IL17RA	interleukin 17 receptor A	NPX_105_IL_17RA	IL-17RA	no difference
Q9Y275	0,098	5,96	2,32	2,06E-02	5,34E-02	-4,49	10673	TNFSF13B	TNF superfamily member 13b	NPX_159_TNFSF13B	TNFSF13B	no difference
P15086	0,128	3,86	2,31	2,08E-02	5,34E-02	-4,50	1360	CPB1	carboxypeptidase B1	NPX_174_CPB1	CPB1	no difference
P15090	0,159	5,93	2,31	2,11E-02	5,34E-02	-4,52	2167	FABP4	fatty acid binding protein 4	NPX_129_FABP4	FABP4	no difference
P24158	0,092	4,42	2,29	2,21E-02	5,34E-02	-4,55	5657	PRTN3	proteinase 3	NPX_160_PRTN3	PRTN3	no difference
P16581	0,098	2,21	2,29	2,21E-02	5,34E-02	-4,55	6401	SELE	selectin E	NPX_136_SELE	SELE	no difference
Q5T2D2	-0,087	4,09	-2,28	2,28E-02	5,39E-02	-4,58	79865	TREML2	triggering receptor expressed on myeloid cells like 2	NPX_128_TLT_2	TLT-2	no difference
P04080	0,104	5,14	2,12	3,44E-02	7,90E-02	-4,93	1476	CSTB	cystatin B	NPX_114_CSTB	CSTB	no difference
P00750	0,136	5,03	2,06	3,92E-02	8,80E-02	-5,05	5327	PLAT	plasminogen activator, tissue type	NPX_177_T_PA	t-PA	no difference
Q13867	0,062	4,76	2,02	4,41E-02	9,50E-02	-5,15	642	BLMH	bleomycin hydrolase	NPX_121_BLM_ HYDROLASE	BLM HL	no difference
P17931	-0,064	5,04	-2,01	4,44E-02	9,50E-02	-5,15	3958	LGALS3	galectin 3	NPX_117_GAL_3	Gal-3	no difference
P28799	0,061	3,46	1,97	4,91E-02	1,03E-01	-5,23	2896	GRN	granulin precursor	NPX_118_GRN	GRN	no difference
P13598	0,070	4,93	1,95	5,16E-02	1,06E-01	-5,28	3384	ICAM2	intercellular adhesion molecule 2	NPX_188_ICAM_2	ICAM-2	no difference
Q9Y624	0,085	4,67	1,87	6,22E-02	1,23E-01	-5,43	50848	F11R	F11 receptor	NPX_167_JAM_A	JAM-A	no difference
P36941	0,072	3,63	1,86	6,38E-02	1,23E-01	-5,45	4055	LTBR	lymphotoxin beta receptor	NPX_123_LTBR	LTBR	no difference
Q99969	-0,068	11,33	-1,85	6,42E-02	1,23E-01	-5,46	5919	RARRES2	retinoic acid receptor responder 2	NPX_187_RARRES2	RARRES2	no difference
O00175	0,112	5,23	1,81	7,09E-02	1,33E-01	-5,54	6369	CCL24	C-C motif chemokine ligand 24	NPX_132_CCL24	CCL24	no difference
P15085	0,104	4,32	1,77	7,65E-02	1,41E-01	-5,60	1357	CPA1	carboxypeptidase A1	NPX_166_CPA1	CPA1	no difference
Q13740	0,052	4,67	1,72	8,51E-02	1,51E-01	-5,69	214	ALCAM	activated leukocyte cell adhesion molecule	NPX_111_ALCAM	ALCAM	no difference

P30530	0,064	7,59	1,72	8,56E-02	1,51E-01	-5,69	558	AXL	AXL receptor tyrosine kinase	NPX_154_AXL	AXL	no difference
P36222	0,110	6,30	1,71	8,68E-02	1,51E-01	-5,70	1116	CHI3L1	chitinase 3 like 1	NPX_175_CHI3L1	CHI3L1	no difference
Q86VB7	0,071	7,36	1,71	8,84E-02	1,51E-01	-5,72	9332	CD163	CD163 molecule	NPX_116_CD163	CD163	no difference
Q9NPY3	0,063	9,34	1,67	9,44E-02	1,58E-01	-5,77	22918	CD93	CD93 molecule	NPX_181_CD93	CD93	no difference
P08887	-0,057	10,54	-1,51	1,31E-01	2,15E-01	-6,03	3570	IL6R	interleukin 6 receptor	NPX_142_IL_6RA	IL6-RA	no difference
Q9UBR2	-0,055	4,77	-1,50	1,35E-01	2,17E-01	-6,05	1522	CTSZ	cathepsin Z	NPX_185_CTSZ	CTSZ	no difference
O00626	-0,088	2,15	-1,46	1,44E-01	2,28E-01	-6,10	6367	CCL22	C-C motif chemokine ligand 22	NPX_149_CCL22	CCL22	no difference
P56470	-0,064	3,54	-1,44	1,50E-01	2,34E-01	-6,13	3960	LGALS4	galectin 4	NPX_168_GAL_4	Gal-4	no difference
Q12860	0,047	2,44	1,38	1,68E-01	2,57E-01	-6,22	1272	CNTN1	contactin 1	NPX_126_CNTN1	CNTN1	no difference
P27930	0,046	4,52	1,36	1,73E-01	2,61E-01	-6,24	7850	IL1R2	interleukin 1 receptor type 2	NPX_169_IL_1RT2	IL-1RT2	no difference
Q07654	0,066	5,82	1,32	1,87E-01	2,76E-01	-6,30	7033	TFF3	trefoil factor 3	NPX_112_TFF3	TFF3	no difference
P19438	0,057	5,49	1,31	1,89E-01	2,76E-01	-6,30	7132	TNFRSF1A	TNF receptor superfamily member 1A	NPX_191_TNF_R1	TNF-R1	no difference
P20160	0,048	2,12	1,27	2,03E-01	2,91E-01	-6,35	566	AZU1	azurocidin 1	NPX_137_AZU1	AZU1	no difference
P80370	-0,065	5,01	-1,26	2,09E-01	2,96E-01	-6,38	8788	DLK1	delta like non-canonical Notch ligand 1	NPX_138_DLK_1	DLK-1	no difference
Q9HD89	0,052	6,40	1,20	2,32E-01	3,19E-01	-6,45	56729	RETN	resistin	NPX_143_RETN	RETN	no difference
Q16663	0,052	7,03	1,19	2,32E-01	3,19E-01	-6,45	6359	CCL15	C-C motif chemokine ligand 15	NPX_171_CCL15	CCL15	no difference
Q9NQ76	-0,044	2,86	-1,14	2,54E-01	3,44E-01	-6,51	56955	MEPE	matrix extracellular phosphoglycoprotein	NPX_120_MEPE	MEPE	no difference
P01589	-0,049	4,25	-1,13	2,58E-01	3,44E-01	-6,53	3559	IL2RA	interleukin 2 receptor subunit alpha	NPX_109_IL2_RA	IL2-RA	no difference
O14798	-0,043	5,86	-1,10	2,72E-01	3,57E-01	-6,56	8794	TNFRSF10C	TNF receptor superfamily member 10c	NPX_134_TNFRSF10C	TNFRSF10C	no difference
P04085	0,058	1,36	1,07	2,85E-01	3,70E-01	-6,59	5154	PDGFA	platelet derived growth factor subunit A	NPX_190_PDGF_ SUBUNIT_A	PDGFsA	no difference
O75594	0,041	7,07	0,94	3,45E-01	4,41E-01	-6,72	8993	PGLYRP1	peptidoglycan recognition protein 1	NPX_165_PGLYRP1	PGLYRP1	no difference
P07339	0,032	3,58	0,93	3,53E-01	4,45E-01	-6,73	1509	CTSD	cathepsin D	NPX_164_CTSD	CTSD	no difference
P19957	0,046	3,71	0,88	3,80E-01	4,72E-01	-6,78	5266	PI3	peptidase inhibitor 3	NPX_151_PI3	PI3	no difference
O15467	0,039	5,92	0,85	3,96E-01	4,86E-01	-6,80	6360	CCL16	C-C motif chemokine ligand 16	NPX_196_CCL16	CCL16	no difference
P02144	0,047	6,92	0,81	4,17E-01	5,05E-01	-6,83	4151	MB	myoglobin	NPX_158_MB	MB	no difference
P78324	0,030	3,51	0,79	4,32E-01	5,16E-01	-6,85	140885	SIRPA	signal regulatory protein alpha	NPX_170_SHPS_1	SHPS-1	no difference
P20333	0,035	5,01	0,77	4,40E-01	5,19E-01	-6,87	7133	TNFRSF1B	TNF receptor	NPX_106_TNF_R2	TNF-R2	no difference

									superfamily member 1B			
Q8NBP7	-0,021	2,22	-0,72	4,69E-01	5,47E-01	-6,90	255738	PCSK9	proprotein convertase subtilisin/kexin type 9	NPX_161_PCSK9	PCSK9	no difference
O95998	0,027	6,35	0,65	5,16E-01	5,93E-01	-6,95	10068	IL18BP	interleukin 18 binding protein	NPX_182_IL_18BP	IL-18BP	no difference
P00533	-0,016	1,01	-0,63	5,29E-01	6,01E-01	-6,96	1956	EGFR	epidermal growth factor receptor	NPX_179_EGFR	EGFR	no difference
Q13231	-0,047	2,77	-0,55	5,81E-01	6,52E-01	-7,01	1118	CHIT1	chitinase 1	NPX_145_CHIT1	CHIT1	no difference
Q9H2A7	-0,015	6,09	-0,45	6,52E-01	7,12E-01	-7,06	58191	CXCL16	C-X-C motif chemokine ligand 16	NPX_141_CXCL16	CXCL16	no difference
P05121	0,031	4,66	0,45	6,53E-01	7,12E-01	-7,06	5054	SERPINE1	serpin family E member 1	NPX_131_PAI	PAI	no difference
P25445	0,015	4,71	0,44	6,58E-01	7,12E-01	-7,06	355	FAS	Fas cell surface death receptor	NPX_157_FAS	FAS	no difference
P05164	0,013	3,92	0,40	6,93E-01	7,41E-01	-7,08	4353	MPO	myeloperoxidase	NPX_140_MPO	MPO	no difference
Q92956	0,014	4,71	0,31	7,56E-01	7,99E-01	-7,11	8764	TNFRSF14	TNF receptor superfamily member 14	NPX_101_TNFRSF14	TNFRSF14	no difference
P14780	-0,015	3,49	-0,27	7,90E-01	8,26E-01	-7,13	4318	MMP9	matrix metallopeptidase 9	NPX_107_MMP_9	MMP-9	no difference
P16109	-0,008	8,37	-0,18	8,60E-01	8,89E-01	-7,15	6403	SELP	selectin P	NPX_113_SELP	SELP	no difference
P42574	0,009	6,42	0,14	8,87E-01	9,07E-01	-7,15	836	CASP3	caspase 3	NPX_172_CASP_3	CASP-3	no difference
P54760	-0,002	2,04	-0,08	9,39E-01	9,49E-01	-7,16	2050	EPHB4	EPH receptor B4	NPX_108_EPHB4	EPHB4	no difference
P05107	-0,002	4,55	-0,04	9,65E-01	9,65E-01	-7,16	3689	ITGB2	integrin subunit beta 2	NPX_103_ITGB2	ITGB2	no difference
P13686	-0,302	5,02	-8,71	9,91E-18	4,43E-16	29,42	54	ACP5	acid phosphatase 5, tartrate resistant	NPX_148_TR_AP	TR-AP	downregulated
P01130	-0,282	3,63	-6,21	7,46E-10	9,80E-09	11,70	3949	LDLR	low density lipoprotein receptor	NPX_102_LDL_ RECEPTOR	LDL	downregulated
Q15166	-0,257	5,04	-4,86	1,31E-06	1,34E-05	4,49	5446	PON3	paraoxonase 3	NPX_184_PON3	PON3	downregulated
P16422	-0,225	3,55	-3,97	7,58E-05	6,34E-04	0,63	4072	EPCAM	epithelial cell adhesion molecule	NPX_152_EP_CAM	Ep-Cam	downregulated