

# Biomarker der kardiorenalen Achse

## Biomarkers of the Cardiorenal Axis

18.-19. January 2018

Multiplex-Proteomics  
January 17, 2018



Deutsches Zentrum für Herzinsuffizienz  
Würzburg



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Sehr geehrte Frau Kollegin,  
sehr geehrter Herr Kollege,

die pathophysiologischen Verbindungen zwischen Erkrankungen des Herzens und der Niere rücken weiter in den Blickpunkt des wissenschaftlichen Interesses. Ihr Verständnis wird auf der konsequenten Anwendung systembiologischer Ansätze beruhen. Die Kooperation zwischen der Deutschen Diabetes Dialyse (4D) – Studie und die Ludwigshafen Risk and Cardiovascular Health (LURIC) Study bildet diese Entwicklungen ab. Auch noch mehr als 20 Jahre nach dem Beginn beider Studien ergeben sich viele wissenschaftliche Interaktionen zwischen den beteiligten Wissenschaftlern.

Die Tagung «Biomarker der kardiorealen Achse» wird es auch im Jahr 2018 zum Ziel haben, den neuesten Stand der Biomarker-Forschung an den Schnittstellen zwischen Kardiologie, Nephrologie, Labormedizin und angrenzenden Disziplinen zu behandeln.

Erstmals im Jahr 2018 bieten wir in Zusammenarbeit und mit Unterstützung der Firma Olink Proteomics, Uppsala, Schweden, am Mittwoch, den 17. Januar 2018, ein Satellitensymposium zum Thema Einsatz des Proximity Extension Assay (PEA) in der Biomarker Forschung an. Die Teilnehmerzahl dieser Veranstaltung ist begrenzt. Wir bitten daher um frühzeitige Anmeldung.

Wir hoffen, mit diesem Programm Ihr Interesse zu wecken und würden uns über viele Teilnehmer und gute Diskussionen freuen.

Prof. Dr. med. Christoph Wanner  
Prof. Dr. med. Winfried März  
Prof. Dr. med. Bernhard K. Krämer

*Die Veranstaltung wurde bei der Landesärztekammer Bayern zur Zertifizierung angemeldet.*

Dear Colleagues,

*The pathophysiological links between diseases of the heart and the kidney stay in the focus of scientific interest. Our understanding of this interactions will be based on the consistent application of systems biology approaches. The cooperation between the German Diabetes Dialysis (4D) - Study and the Ludwigshafen Risk and Cardiovascular Health (LURIC) Study reflects these developments. Still more than 20 years after initiation of both studies, many scientific interactions have evolved between the contributing scients.*

*Also in 2018, the meeting „Biomarkers of Cardiorenal Axis“ is intended to display the state of the biomarker research at the interfaces between Cardiology, Nephrology and Laboratory Medicine and related disciplines.*

*For the first time in 2018 and in cooperation with the support of Olink Proteomics, Uppsala, Sweden, we will be offering a satellite symposium on addressing the use of the Proximity Extension Assay (PEA) in biomarker research on Wednesday, January 17, 2018. The number of participants in this event is limited. We therefore ask for early registration.*

*We hope to draw your interest with this program and would be excited about many many participants and good discussions.*

*Prof. Dr. med. Christoph Wanner  
Prof. Dr. med. Winfried März  
Prof. Dr. med. Bernhard K. Krämer*

*This event was submitted to the Medical Association for CME certification.*

# Program

Wednesday, January 17, 2018

Getting to the heart of the matter - targeted protein biomarker discovery for the advancement of precision medicine in cardiology and nephrology

11:15	<b>Arrival, registration, coffee</b>	14:10	Biomarker for cardiovascular precision medicine. Are we there yet?
11:45	<b>Lunch</b>		F. Zannad , Nancy
12:30	<b>Opening and overview on the topics of the meeting</b> A. Ballagi, Uppsala W. März, Mannheim	14:40	Screening multiple biomarkers for associations with major cardiovascular events L. Wallentin, Uppsala
12:40	<b>Proximity extension assay and applications</b>	15:10	Title to be announced W. Koenig, Munich
12:40	Proximity Extension Assay (PEA) - A technology enabling targeted protein biomarker research Olink R&D, Uppsala	15:30	<b>Coffee break</b>
13:00	Prognostic biomarkers associated with cardiovascular Events in atrial fibrillation: Insights from the Aristotle Trial using Proximity Extension Assay (PEA)-technology Agneta Siegbahn, Uppsala	16:00	<b>Biomarker discovery in cardiovascular and renal disorders</b> Proteomic analysis; insights from the Aurora trial P. Rossinol, Nancy
13:20	Plasma proteomics for epidemiology: combining antibody and mass spectrometry-based measurements M. Mayr, London	16:00	Experience from renal cohorts with CVD endpoints and preliminary results from urine analyses B. Fellström, Uppsala
13:50	Biomarkers reflecting tissue injury and repair in prediction of cardiovascular disease J. Nilsson, Lund	16:40	<b>Plenary discussion</b> Agneta Siegbahn, M. Mayr, J. Nilsson, P. Zannad, L. Wallentin, P. Rossinol, B. Fellström, W. Koenig
14:10	<b>Epidemiological studies to advance precision medicine</b>	17:40	<b>Closing remarks</b> A. Ballagi, Uppsala W. März, Mannheim
	For further information on the proximity extension technique visit <a href="http://www.olink.com">www.olink.com</a>	17:50	End of the first day meeting
		19:30	Evening event: Wine tasting at the Residenz Würzburg

# Program

Thursday, January 18, 2018

9:00	<b>Registration, coffee</b>	15:00	<b>Workshop I: Metabolism and Inflammation</b>
9:30	<b>Welcome and introduction into the topic of the meeting</b> C. Wanner, Würzburg, W. März, Mannheim, B.K. Krämer, Mannheim	15:00	Chair: M. Herrmann, Graz LDL cholesterol: really the culprit? R. Laaksonen, Tampere
9:45	<b>Perspectives</b> Chair: P. Lansberg, Amsterdam	15:25	Lipoproteins and inflammation T. Speer, Homburg
9:45	Translating clinical trials into patient care T. Wierzbicki, London	15:50	Lipid-lowering by diet: Hard facts, pious wishes? S. Lorkowski, Jena
10:15	EMPA-REG Outcome: Nephroprotection through SLGT2 inhibition C. Wanner, Würzburg	16:15	Afamin is associated with prevalent and incident type 2 diabetes in the general population and predictive for gestational diabetes in pregnancy H. Dieplinger
10:45	New opportunities and obstacles for biomarker based decision support in cardiovascular care L. Wallentin, Uppsala	15:00	<b>Workshop II: Biomarkers of kidney disease</b> Chair: H.J. Anders, Munich
11:15	<b>Coffee Break</b>	15:00	Does iron deficiency affect the interaction between FGF-23 and cardiovascular disease? G. Heine, Homburg
11:30	<b>Genomics</b> Chair: Hans Dieplinger, Innsbruck	15:25	The role of vitamin K in vascular calcification V. Brandenburg, Aachen
11:30	Novel drug targets arising from genome-wide association studies H. Schunkert, Munich	15:50	The Mineralocorticoid Receptor Antagonists in End-Stage Renal Disease Study (MiREnDa) Study F. Hammer, Würzburg
12:00	TBD K. Stefansson, Reykjavic	16:15	Tubular Dickkopf-3 and the development of renal atrophy and fibrosis D. Fliser, Homburg
12:30	Recent developments in Mendelian randomization studies in the age of large-scale accessible genomics data J. Zheng, Bristol	16:40	<b>Coffee Break</b>
13:00	<b>Lunch Break</b>		
13:30	<b>Guided Poster Discussion</b> Chair: B. Fellström, Uppsala, E. Windler, Hamburg		

# Program

Thursday, January 18, 2018

17:00	<b>Workshop III: Biomarkers of Heart Disease</b> Chair: J. Scherberich, Munich
17:00	Inflammatory cells in heart disease A. Zirlik, Freiburg
17:25	Gut microbiota and vascular disease N. Marx, Aachen
17:50	Serum Uromodulin and cardiovascular mortality M. Kleber, Mannheim
18:15	Lipoprotein analysis by nuclear magnetic resonance spectroscopy P. Pagel, Regensburg
17:00	<b>Workshop IV: Biomarkers of Kidney Disease</b> Chair: A. Ritsch, Innsbruck
17:00	Novel mechanisms of vascular calcification and clinical implications J. Völk, Berlin
17:25	SuPAR in clinical cohorts Claudia Sommerer, Heidelberg
17:50	Parameters of calcium and phosphate metabolism in cardiac surgical patients – Risk markers of clinical outcome A. Zittermann, Bad Oeynhausen
18:15	„Proteasuria – a novel mechanism of edema development in the nephrotic syndrome F. Artunc, Tübingen
18:35	End of the second day
20:00	Get together

Friday, January 19, 2017

8:30	<b>Clinical Trials</b> Chair: B. Fellström, Uppsala
8:30	Translational science: From biology to therapeutics U. Fraass, Munich
9:00	PCSK9 – Update U. Laufs, Leipzig
9:30	CANTOS: Canakinumab for everyone ? W. König, München
10:00	<b>Coffee Break</b>
10:15	<b>Renocardial markers</b> Chair: W. Herrmann, Homburg
10:15	Carbamylated albumin – update 2018 A. Berg, Boston
10:45	Circulating permeability factor suPAR: From concept to clinic J. Reiser, Chicago
11:15	Omega 3 index and blood pressure – a causal relationship? C. von Schacky, Munich
11:45	Vitamin D: still hot? S. Pilz, Graz
12:15	<b>Wrap up</b> C. Wanner, Würzburg, W. März, Mannheim, B. K. Krämer, Mannheim
12:30	<b>Lunch and farewell</b>

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## Poster Presentations

Prognostic value of Cathepsin S in the 4D trial

H..J. Anders et al., Munich

Prognostic significance of hemodynamic parameters in hemodialysis patients

F. Artunc et al., Tübingen

Effect of spironolactone on vascular function in patients on hemodialysis

S. Bausch et al., Würzburg

A critical update on solarium use and risk for malignant melanoma: meta-analysis and evidence-based systematic review

B. Burgard et al., Homburg

Testosterone in dialysis patients

J.J. Carrero et al., Würzburg

Effect of the MoKaRi diet on the plasma lipidome

Christine Dawczynski et al., Jena

The association of INR with mortality in patients referred for coronary angiography

Graciela Delgado et al., Mannheim

Clinical benefit of a short term dietary oatmeal intervention in patients with type 2 diabetes mellitus and severe insulin resistance: A cross-over study

Graciela Delgado et al., Mannheim

The diagnostic value of high sensitivity troponin in dialysis patients

Christiane Drechsler et al., Würzburg

Lipoprotein (a) in the DETECT study

A. Dressel et al., Mannheim

Health economic evaluation of PCSK9-Inhibition

A. Dressel et al., Mannheim

Non-oxidised PTH and clinical outcomes in patients with coronary artery disease

T. Dschietzig, Berlin and Bensheim

Neprilysin in CKD

I. Emrich, Homburg

Beta trace protein and mortality

D. Enko et al., Steyr

Prevalence of familial hypercholesterolemia in the DEGS study

F. Fath et al., Mannheim

H-ALERT: An approach to decision support in primary care

F. Fath et al., Mannheim

The aldosterone to renin ratio in the clinical laboratory

T. Fenyesi et al., Weiden

Prevalence and determinants of vitamin D deficiency in Germany

T. Fenyesi et al., Weiden

ODIN: Mendelian randomization of vitamin D and mortality

M. Gaksch et al., Graz

Effects of vitamin D supplementation on its metabolism in vitamin D insufficient adults

M. Gaksch et al., Graz

Development of a scoring system for predicting the efficacy of statin treatment in patients on hemodialysis

B. Genser et al., Vienna

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## Poster Presentations

Time on hemodialysis and clinical efficacy of statins  
in the 4D study

B. Genser et al., Vienna

Systems biology approaches to risk prediction

Ingrid Gergei et al., Mannheim

Genome wide association study of klotho

Ingrid Gergei et al., Mannheim

Galektin 3 – binding protein and CD163 interaction

C. Gleissner et al., Heidelberg

Assessment of the heart age using the Coropredict  
multimarker panel

Tanja Grammer et al., Mannheim

Left ventricular hypertrophy measured by MRI,  
echocardiography and ECG in patients on hemodialysis  
S. Grebe et al., Würzburg

Galectin 3 – interaction with renin-angiotensin system

M. Grübler et al., Bern

7-DHC and mortality in the LURIC study

M. Grübler et al., Bern

“Fass Dir ein Herz”: the Austrian registry for familial  
hypercholesterolemia

Gabriele Hanauer-Mader et al., Vienna

Mineralocorticoid hormone antagonism and its  
metabolic consequences in hemodialysis patients

T. Hauser et al., Würzburg

Cellular cholesterol efflux in participants of the Young  
Fins Study

Monika Hunjadi et al., Innsbruck

A case of glycerol kinase deficiency with  
pseudohypertriglyceridemia

Christel König, G. Klose et al., Bremen

Prevalence of familial hypercholesterolemia in the  
LURIC study estimated by the CARRENAL custom  
designed microarray

Kleber et al., Mannheim

Saturated fatty acids and mortality

M. Kleber et al., Mannheim

Genome wide association study of homoarginine  
using the HRC reference panel

M. Kleber et al., Mannheim

Vascular adhesion molecules and severe obesity –  
a subgroup analysis of the LURIC study

M. Kleber et al., Mannheim

Mortality prediction in stable hemodialysis patients  
with YKL-40

G. Lorenz et al. Munich

The NutriCARD cluster

S. Lorkowski et al., Jena

Measurement of vitamin D metabolites by mass  
spectroscopy

S. Zelzer et al., Graz

Thyroid function and vitamin D

A. Merke et al., Bensheim

Vitamin D in the DETECT study

A. Merke et al., Bensheim

Thyroid metabolism and low density lipoproteins

A. Merke et al., Bensheim

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## Poster Presentations

Regional purchasing power and mortality in the Rhine-Neckar Region

Angela Moissl et al., Mannheim

Homoarginine - a prognostic indicator in adolescents and adults with complex congenital heart disease?

Tanja M. Raedle-Hurst, Homburg

Telomer length and mortality in the LURIC study

Irene Pusceddu et al., Bozen

Variants of genes involved in skin pigmentation are associated with vitamin D concentrations

R. Saternus et al., Homburg

Comparison of contemporary methods to measure lipoprotein (a)

H. Scharnagl et al., Graz

Effects of PCSK9 inhibition on lipoprotein fractions and circulating PCSK9

H. Scharnagl et al., Berlin

Genetics of patients with clinical suspicion of familial hypercholesterolemia of a lipidology specialty outpatients unit

Ulrike Schatz et al., Dresden

Apolipoprotein C3 and mortality in the LURIC study

G. Silbernagel et al., Graz

NMR resolves HDL subfractions with differential effects on mortality

G. Silbernagel et al., Graz

LDL triglycerides, but not LDL cholesterol predict mortality in the LURIC study

G. Silbernagel et al., Graz

Cascade Screening and Registry for High Cholesterol (CaRe-High): interim results

Nina Schmidt, Ulrike Schatz et al., Mannheim

Role of vitamin D deficiency in chronic obstructive pulmonary disease - an overview

R. Siekmeier et al., Bonn

Role of vitamin D deficiency in asthma bronchiale - an overview

R. Siekmeier et al., Bonn

Monitoring of the NFAT regulated gene expression in NTX patients treated with tacrolimus

Claudia Sommerer et al., Heidelberg

Hepcidin and mortality in the LURIC study

P. Strnad et al., Aachen

Characteristics of long-term survivors in 4D

S. Triebssvatter et al., Würzburg

Effects of vitamin D supplementation on FGF23: a randomized-controlled trial

C. Trummer et al., Graz

Phosphate meets uromodulin

J. Scherberich et al., Munich

Effect of Vitamin D supplementation on the RAAS system in end-stage heart failure patients

A. Zittermann et al., Bad Oeynhausen

ADMA und MPO: Is there an interaction?

Sieglinde Zelzer et al., Graz

## Poster Presentations

Effects of declining renal function and possible thresholds of renal function on plasma malondialdehyde and myeloperoxidase concentrations from the BIOC-LAIMS Study

Sieglinde Zelzer et al., Graz

Link between myeloperoxidase, asymmetric dimethylarginine and the renin-angiotensin-aldosterone-system in cardiovascular risk patients: Cross-sectional findings from the Ludwigshafen Risk and Cardiovascular Health (LURIC) Study Lipoprotein (a) and long-term prognosis in the LURIC study

Sieglinde Zelzer et al., Graz

Lipoprotein (a) and long-term prognosis in the LURIC study

S. Zewinger et al., Homburg Saar

LOGISTICS

# Logistics

## Biomarkers of the cardiorenal axis

### MEETING VENUE

Deutsches Zentrum für Herzinsuffizienz  
Universitätsklinik Würzburg  
Am Schwarzenberg 15, Haus A15  
97078 Würzburg

### MEETING TIMES

Wednesday, January 17, 2018  
12:30 – 17:50

Thursday, January 18, 2018  
9:00 – 18:35

Friday, January 19, 2018  
8:30 – 12:30

### ORGANIZERS

D·A·CH-Gesellschaft Prävention von  
Herz-Kreislauf-Erkrankungen e. V.  
Schulterblatt 120  
c/o MasterMedia GmbH  
20357 Hamburg

Medizinische Klinik V  
Universitätsmedizin Mannheim  
Theodor-Kutzer-Ufer 1-3  
68167 Mannheim

SYNLAB Akademie für Ärztliche Fortbildung  
SYNLAB Holding Deutschland GmbH  
P5,7  
68161 Mannheim

### ADDITIONAL POSTERS AND INFORMATION

Do you wish to contribute a poster?  
Do you need other information?

### PLEASE CONTACT

**Prof. Dr. med. Christoph Wanner**  
Universitätsklinikum Würzburg  
Medizinische Klinik und Poliklinik I  
Abteilung Nephrologie  
Oberdürrbacher Straße 6  
97080 Würzburg  
Telefon +49 931 201-39030  
Telefax +49 621 201-639030  
E-Mail Wanner\_C@ukw.de

**Prof. Dr. med. Bernhard K. Krämer**  
Medizinische Klinik V  
Universitätsmedizin Mannheim  
Theodor-Kutzer-Ufer 1-3  
68167 Mannheim  
Telefon +49 621 383-5172  
Telefax +49 621 383-3804  
E-Mail bernhard.kraemer@umm.de

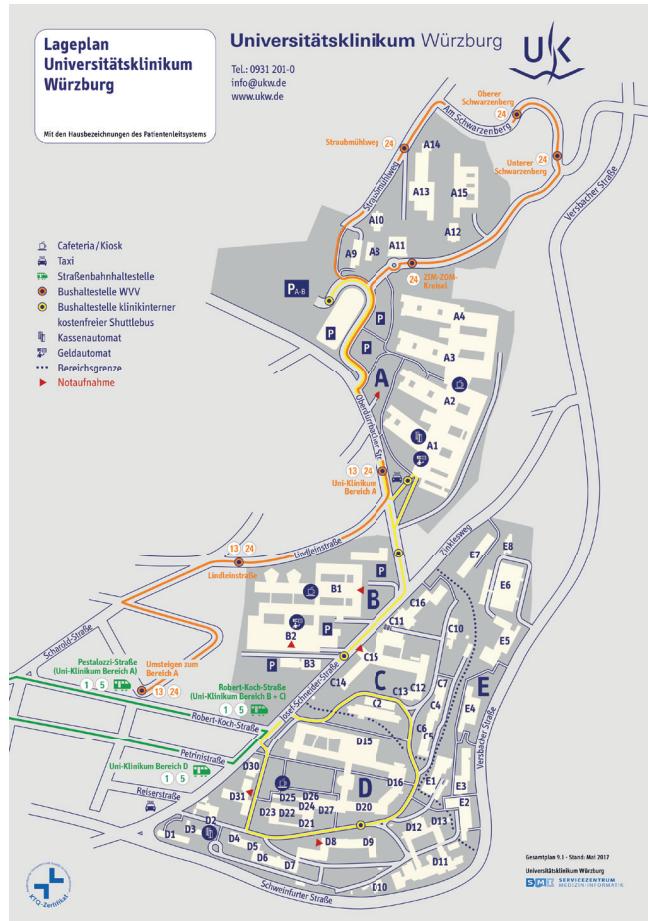
**Univ.-Prof. Dr. med. Winfried März**  
SYNLAB Akademie für Ärztliche Fortbildung  
SYNLAB Holding Deutschland GmbH  
P5,7  
68161 Mannheim  
Telefon +49 621 43179-432  
Telefax +49 621 43179-433  
E-Mail winfried.maerz@synlab.com

# Logistics

## Biomarkers of the cardiorenal axis

### LOCATION

Deutsches Zentrum für Herzinsuffizienz  
Universitätsklinik Würzburg  
Am Schwarzenberg 15, Haus A15  
97078 Würzburg



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Immundiagnostik AG  
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1.000 Euro



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Ocupharm GmbH  
1.000 Euro

Ocupharm GmbH

Olink Proteomics  
10.000 Euro



Sanofi-Aventis Deutschland GmbH  
4.000 Euro



Shire Deutschland GmbH  
1.000 Euro



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Diagnostics GmbH  
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# Registration

## Biomarkers of the cardiorenal axis

Please issue your binding registration by 22.12.2018 latest to [www.synlab.com/de/mensch/fortbildung](http://www.synlab.com/de/mensch/fortbildung), by e-mail to [manuel.hormuth@synlab.com](mailto:manuel.hormuth@synlab.com) or [winfried.maerz@synlab.com](mailto:winfried.maerz@synlab.com) or by **fax to +49 (0) 621 43179-433**.

### CONTACT

SYNLAB Akademie für Ärztliche Fortbildung  
SYNLAB Holding Deutschland GmbH

P5, 7  
68161 Mannheim

Telefon +49 (0) 621 43179-432

Telefax +49 (0) 621 43179-433

E-Mail [manuel.hormuth@synlab.com](mailto:manuel.hormuth@synlab.com)  
[winfried.maerz@synlab.com](mailto:winfried.maerz@synlab.com)

**We kindly ask you for binding registration, as non-attendance will generate avoidable costs for the organizers.**

### TEILNAHME SYMPOSIEN

I will participate with \_\_\_ person(s) on the following days

- \_\_\_ person(s) on 17.01.2018  
 \_\_\_ person(s) on 18.01.2018  
 \_\_\_ persons on 19.01.2018

### TEILNAHME ABENDVERANSTALTUNG

- Olink – 17.01.2018 *only possible upon participation in the Olink satellite meeting*  
 Get together – 18.01.2018

### HOTELÜBERNACHTUNG

Number of nights \_\_\_

- Arrival 16.01.2018  
 Arrival 17.01.2018  
 Arrival 18.01.2018

Please provide information completely and clearly

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Address

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Telephone and fax

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E-mail

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Participant name(s)

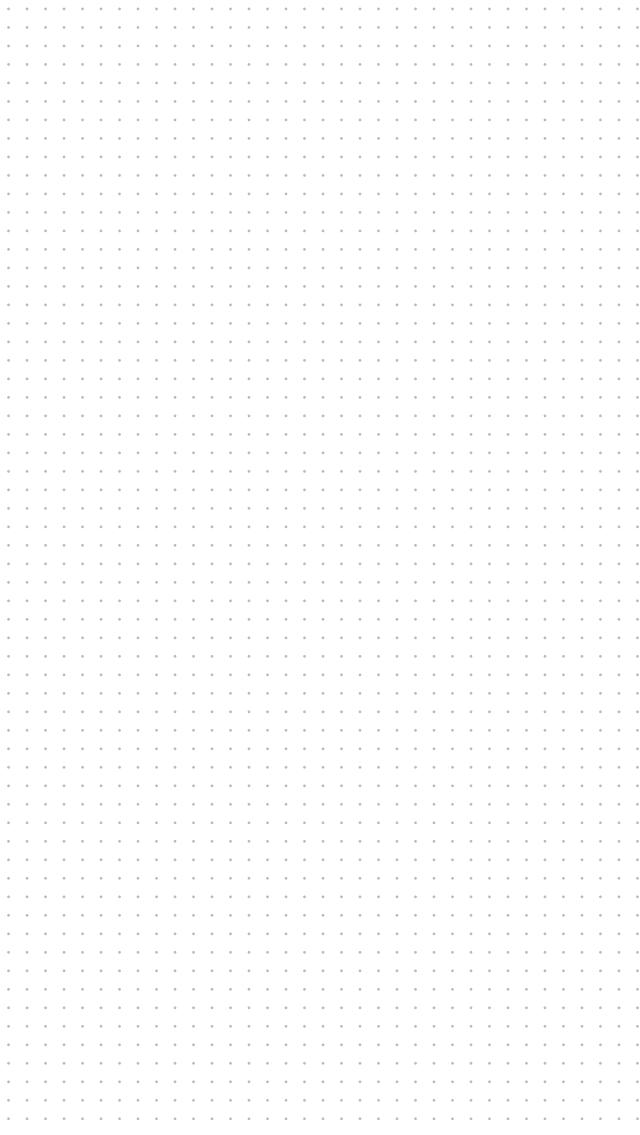
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# Notes



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