

# Post-Covid & Post-Vac-Syndrom

„Therapie“ mit Orthomolekularia, Phytotherapeutika und Allopathika



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# Pionierarbeit?

- ▶ Betrachtung der Symptome im Kontext möglicher Auslöser
- ▶ Einbeziehung von Reaktionsketten im Zusammenhang mit Sars-CoV-2 und mRNA-Vakzinierung
- ▶ Welche Laborparameter sind zielführend
- ▶ Überlegung welche Orthomolekularia und Phytotherapeutika für Behandlungskonzepte sinnvoll erscheinen
- ▶ Erstellung und Anwendung eines first-line Konzepts
- ▶ Abgleich und Integration ergänzender Therapieansätze

# Sind mögliche Wirkstoffe bezahlbar?



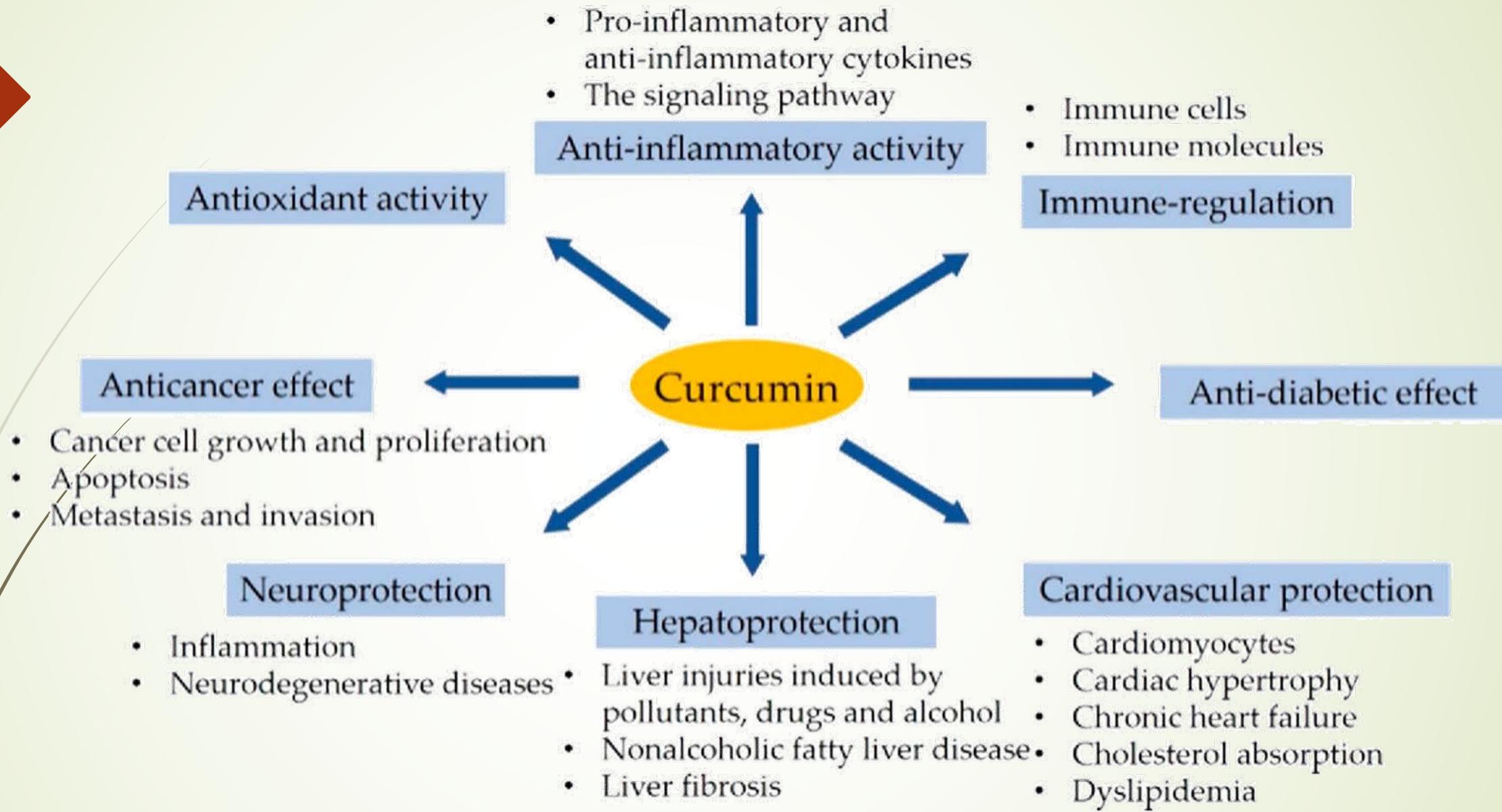
Zink                    EPA/DHA                    L-Arginin                    Melatonin  
Quercetin            Ambroxol                    Selen                    NAC                    Artemisia annua  
Glutathion            Pycnogenol                    Aspirin                    Transferfaktoren            Ivermectin  
Nattokinase            Curcumin                    Cinnarizin                    Vitamin C                    Melatonin  
                          EGCG

# Vielfältige Symptome

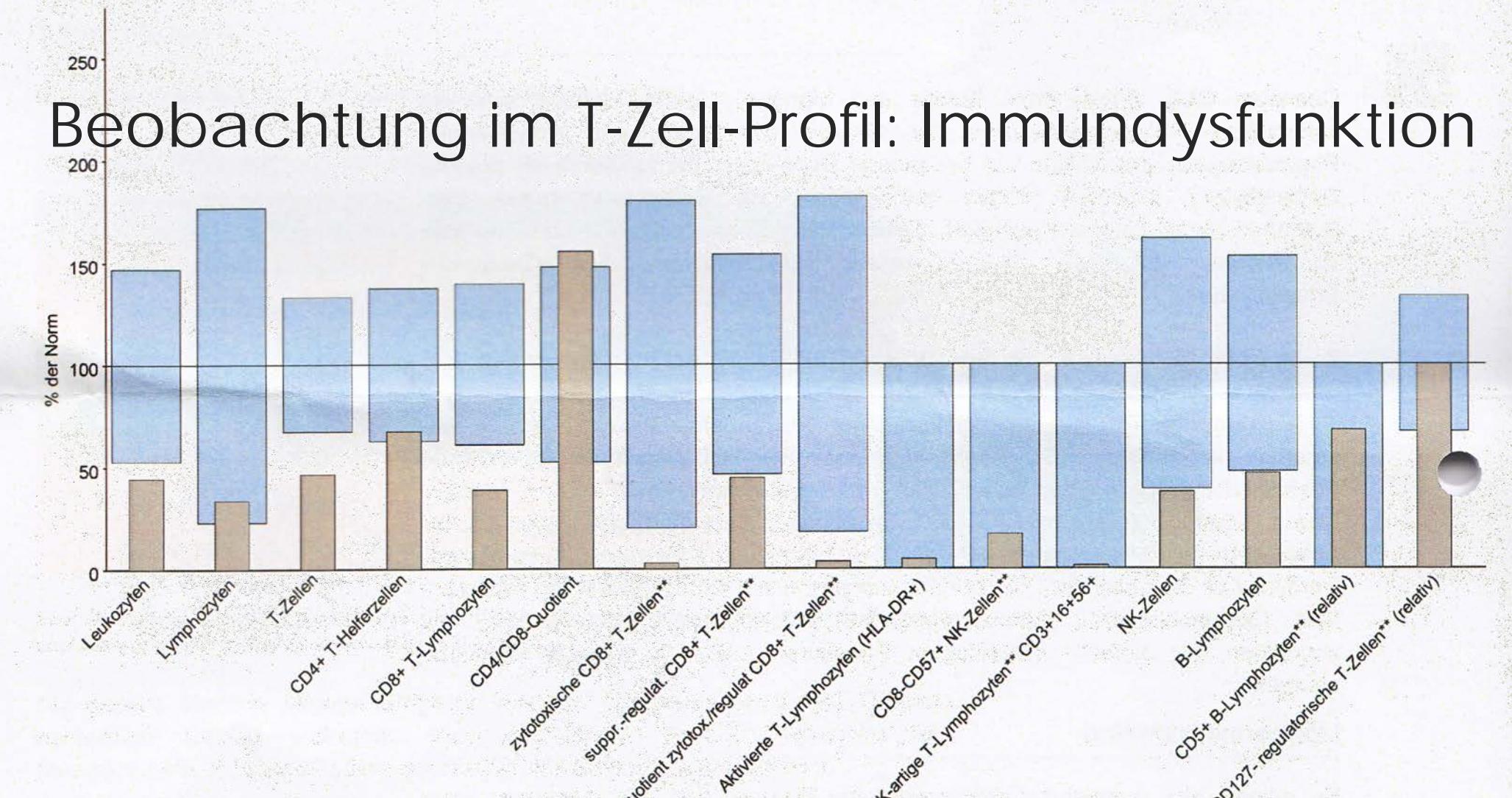


# Chronische Entzündung und Immundysfunktion (1,2,3)

- ▶ Labor zeigt erhöhte proinflammatorische Enzyme IL-1-beta, IL-6, TNF-alpha  
(IMD Labor Berlin / Ganzimmun Diagnostics, Mainz)
- ▶ Idee: Hemmung von IL-1-beta, IL-6, TNF-alpha, NF-kappa-B
- ▶ Antiinflammatorische Orthomolekularia & Phytotherapeutika:  
EPA/DHA (4,5,6), N-Acetylcystein (7,8), Ubiquinol (9), Pycnogenol (10,11,12), Astaxanthin (13,14), Lactoferrin (17), Quercetin (18,7,19), EGCG (20,21), Vitamin C (7), Curcumin (15,16)



# Beobachtung im T-Zell-Profil: Immundysfunktion



► Ortho/Phyto zur Immunregulation: Curcumin (22), EGCG (23,24), Pycnogenol (11), Vitamin C (25), PEA (7), EPA/DHA (4), Vitamin-A (26), Zink (27), Vitamin D (28)

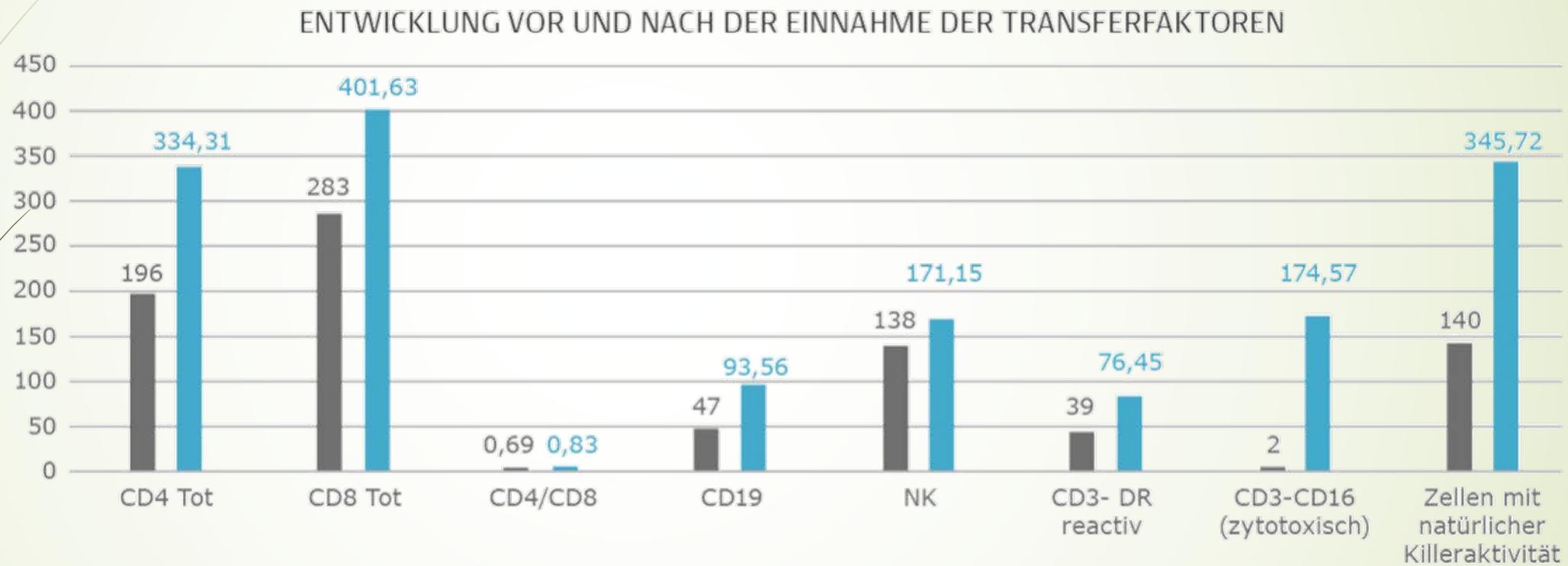
# Empfehlung Chronische Entzündung und Immundysfunktion

- ▶ EPA/DHA (4,5,6)
- ▶ N-Acetylcystein (7,8)
- ▶ Pycnogenol (10,11,12)
- ▶ Quercetin (7,18,19)
- ▶ Lactoferrin (31)
- ▶ Vitamin C (7)
  
- ▶ Evtl. Infusionen
  - ▶ Curcumin (22)
  - ▶ EGCG (20,21,23,24)
  - ▶ Artesunat
- ▶ Evtl. Transferfaktoren (29,32)



# Transferfaktoren

Aminosäuresequenz Ilyaqdl/ vedn (leu-leu-tyr-ala-gln-asp-leu/val-glu-asp-asn



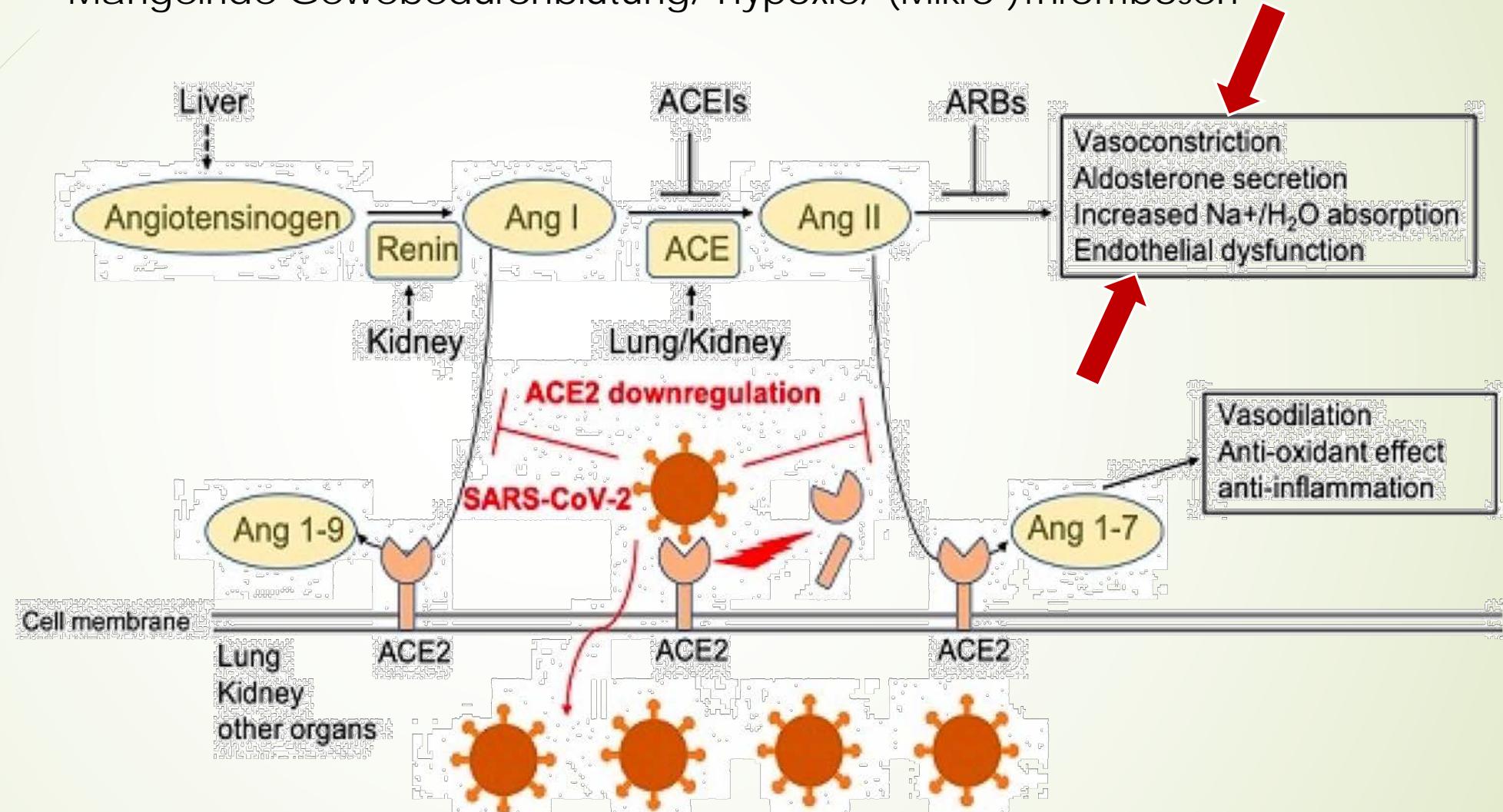
Testimonial Dr. med Ramon Simon-Lopez: Sportler J.V. mit Immundefizit  
Natural Immune Booster (29,31)

# Endotheliale Dysfunktion (10,33,34,35,36,37)

- ▶ Labor: 08/21 nennt Ong SW et al erhöhte Zytokine MIP-1-beta, BDNF, VEGF-A welche auf Endothelschädigung/ endotheliale Dysfunktion hinweisen könnten (3)
- ▶ Mögliche Auslöser/ Förderfaktoren (38-42):
  - ▶ Endothelschädigung durch
    - ▶ Spikebindung an ACE2
    - ▶ Monozyten (mit überlanger Lebenszeit), gefüllt mit „unverdauten“ Spikes
  - ▶ Vasokonstriktion (Angiotensin II)
  - ▶ Oxidativer Stress, freie Radikale
  - ▶ Eisenakkumulation und Ferroptose (38,43)

# Folgen der endothelialen Dysfunktion

- Mangelnde Gewebedurchblutung/ Hypoxie/ (Mikro-)Thrombosen



# Endotheliale Dysfunktion & Gerinnungsbildung

- ▶ Natürliche Reaktion auf Spike-tragende Endothelzellen
- ▶ Direkte Aktivierung der Gerinnungskaskade (44)
- ▶ Aktivierung der Blutplättchen über das Komplementsystem (45)
- ▶ Ausschaltung der körpereigenen Gerinnungshemmung (Heparan/Heparin) (46)
- ▶ Labor: D-Dimere, Thrombozyten, Fibrinogen
- ▶ „Klassische“ Therapie bei Verdacht auf MikrogerinnSEL: ASS 75-100 mg
- ▶ Bei positivem D-Dimere: Eliquis 2 x 2,5 mg/d
- ▶ Wenn  $O^2 < 93\%$  Klassische Gerinnungshemmung mit Eliquis oder Heparin
- ▶ Erreichen wir damit alle GerinnSEL?

# Amyloide-“Knäuel“, die atypischen Gerinnsel

- ▶ Kommt Spike in Kontakt mit Fibrinogen, wandelt sich letzteres in Amyloide (fehlgefaltete Proteine) um. Diese können Amyloide-Knäul bilden. (47,48)
- ▶ (Die Entstehung vom  $\beta$ -Amyloide wurde per PET-Scan in lokalen Lymphknoten nach der Impfung nachgewiesen)
- ▶ Zusätzliche Gefahr:  $\beta$ -Amyloide können Prionen bilden (Omicron besitzt keine Prioneneigenschaften mehr, aber die Impfstoffe)
- ▶ Labor: Thromboelastographie (TEG) theoretisch möglich (in Transplantationszentren)
- ▶ Therapie: Nattokinase kann auch Amyloide auflösen! (49,50)

# Wirkstoffe bei Endothelialer Dysfunktion & Gerinnungsbildung

- ▶ Endothelfunktion, (Mikro-)zirkulation:  
EPA/DHA (4), L-Carnitin (51), Pycnogenol (10,11,12,52), L-Arginin (53,54),  
Vitamin C (7,55), Selen (56), Ginkgo biloba (57)
- ▶ (Mikro-)Thrombosen:  
N-Acetylcystein (58,59), EPA/DHA (4,60), Vitamin K (26,61), B-Vitamine  
(56,26,62), Pycnogenol (11,52), Quercetin (63), EGCG (20), Curcumin (15),  
Magnesium (64), Vitamin D (65)
- ▶ NAC kann Thromben auflösen! (58,59)
- ▶ Nattokinase kann auch Amyloide auflösen! (49,50)

# Nachweis von SARS-CoV-2 RNA/ SARS-CoV-2 Spike-Proteine/ IMPF-MRNA



	Leistung/Material/Versandart	Parameter		Preis in € (brutto)
2.1	<b>Material:</b> 1x Heparin- oder Citratblut (mind. 4ml) oder Serum (mind. 2ml) <b>Versand:</b> innerhalb von 24-48h ohne Kühlung *1)*3)	Quantitative Bestimmung des SARS-CoV-2 Spikeproteins in Plasma/Serum	<input type="checkbox"/>	87,44
2.2	<b>Material:</b> 1x Heparin- oder Citratblut (8ml) <b>Versand:</b> innerhalb von 24-48h ohne Kühlung *1)*3)	Quantitative Bestimmung des SARS-CoV-2 Spikeproteins in Immunzellen (PBMC)	<input type="checkbox"/>	112,26
3.1	<b>Material:</b> 1x Heparinblut (8ml) <b>Versand:</b> innerhalb von 24-48h ohne Kühlung *1)*4)*5)	Nachweis von Impf-mRNA in Immunzellen (PBMC)	<input type="checkbox"/>	174,30
3.2	<b>Material:</b> 1x Heparinblut (8ml) <b>Versand:</b> innerhalb von 24-48h ohne Kühlung *1)*4)*5)	Quantitativer Nachweis von LINE-1 in PBMC (dieses Enzym ist die Voraussetzung für den Einbau von Impf-mRNA in das menschliche Genom) in Immunzellen (PBMC)	<input type="checkbox"/>	174,30
4.1	<b>Material:</b> 1x Stuhlprobe (1 g) <b>Versand:</b> innerhalb von 24-48h ohne Kühlung *1)	Nachweis von SARS-CoV-2 RNA im Stuhl (Persistenz)	<input type="checkbox"/>	147,48
4.2	<b>Material:</b> 1x Heparinblut (8ml) <b>Versand:</b> innerhalb von 24-48h ohne Kühlung *1)*4)*6)	Nachweis von SARS-CoV-2 RNA in Immunzellen (PBMC) (Persistenz)	<input type="checkbox"/>	174,30

# Hyperaktive Mastzellen

- ▶ „Schwere Covid-19-Krankheitsverläufe, Long Covid und Impfreaktionen beruhen vor allem auf einer Überreaktion der Mastzellen“ (Raymond, Ching-A-Sue und Van Hecke, 2020)
- ▶ Mastzellen
  - ▶ Histamin
  - ▶ Serin-Proteininasen (-> Entzündungskaskade)
  - ▶ Prostaglandine (Schleimhautproduktion, Kontraktion der Atemwegsmuskulatur)
  - ▶ Leukotriene (Kontraktion der Atemwegsmuskulatur)
  - ▶ Zytokine (Entzündungsbotenstoffe)
- ▶ Hyperaktive Mastzellen können Lunge, Herz und andere Organe schädigen

# Hyperaktive Mastzellen

- ▶ Diagnostik:  
Labor Blut: Serumtryptasewert dauerhaft über 20 ng/ml  
Labor im gekühlten Urin: Histamin, Prostaglandin, Leukotriene (LTB4, LTC4, LTD4, LTE4) -> siehe auch mastzellenhilfe.de
- ▶ Allopathika bei MACS
  - ▶ Kortikosteroide (Dexamethason)
  - ▶ Antiallergische Medikamente (Ketotifen)
  - ▶ Antibiotika (Clarithromycin)
- ▶ Unterstützung des Histaminabbaus
  - ▶ SAM (85)

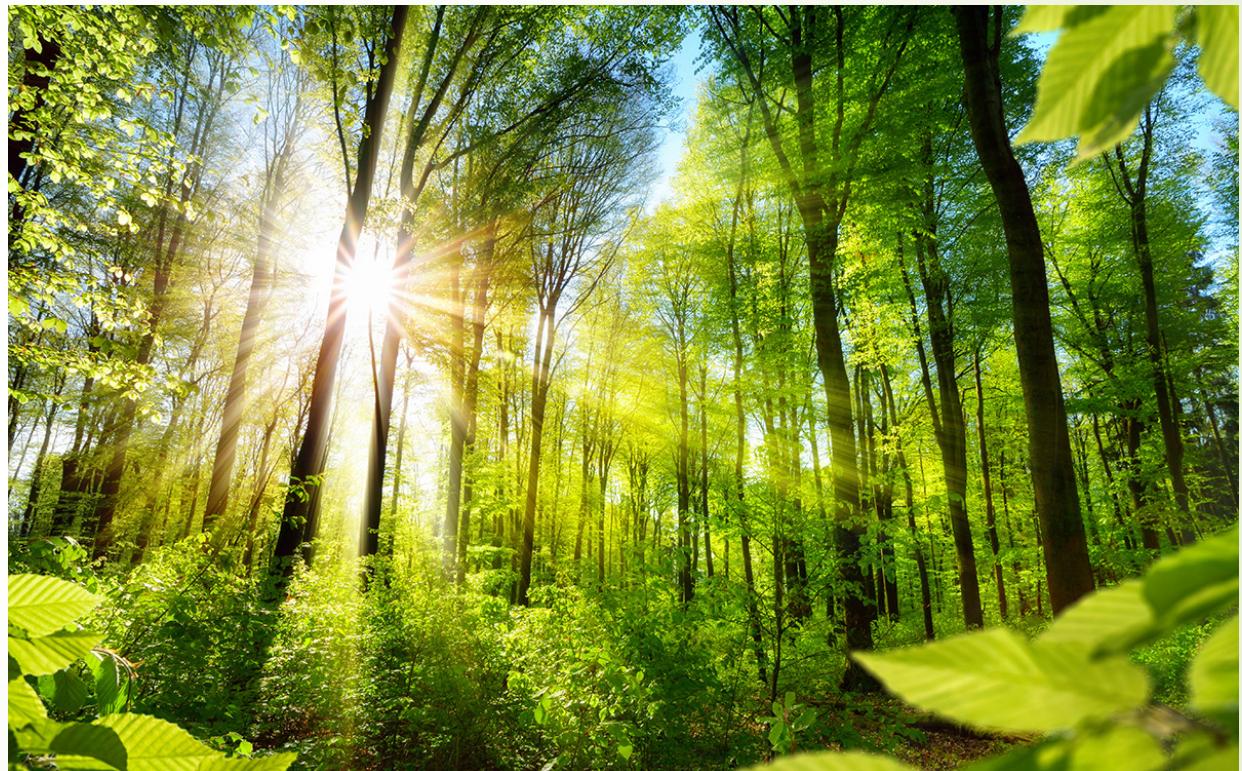
# Hemmen der Mastzellaktivierung

- ▶ Quercetin (-Phospholipid), stabilisiert Mastzellen, hemmt die Freisetzung von Histamin, Zytokinen, Interleukinen (siehe auch Studien zur Gabe von 2 x 200mg, bzw. 3 x 200mg Quercetin bei Covid-19-Patienten; Di Pierro et al., 2021a und 2021b). Quercetin (senkt auch H1-Histaminrezeptoren) (86,87)
- ▶ PEA (reguliert auch hyperaktive Mastzellen herab) (88,89)
- ▶ EPA/DHA (90)
- ▶ Vitamin C (unterdrückt unter anderem Interleukin-6 und hemmt Histaminsynthese in Mastzellen) (86,90)
- ▶ Vitamin D (86)  
Vit.-D-Mangel führt zur Mastzellaktivierung (Liu et al., 2017)  
Vit.-K normalisiert Calcium-Haushalt, wie ein milder Mastzellstabilisator (Klimura et al., 1975)

# Hemmen der Mastzellstabilisatoren

Antiallergisch, indirekt antihistamin und entzündungshemmend

- ▶ Quercetin (86,90,91)
- ▶ PEA (89)
- ▶ Vitamin E (86)
- ▶ Pycnogenol (92)
- ▶ Vitamin D (86)
- ▶ EGCG (91,93)
- ▶ Curcumin (86)
- ▶ L-Theanine (93)
- ▶ Magnesium (64,94)
- ▶ Selen (95)



# Empfehlung bei hyperaktiven Mastzellen

- ▶ Quercetin
- ▶ EPA/DHA
- ▶ Vitamin-C
- ▶ SAM
- ▶ zusätzlich H1-Rezeptor-Antagonist Cinnarizin ein Calcium-Kanal-Blocker (siehe auch Hou et al., 2021; Qu et al., 2021)
- ▶ Bemerkung am Rande, auch bei neu aufgetretenem Bluthochdruck mit RR-Schwankungen nach mRNA-Impfung scheinen blutdrucksenkende Calciumkanalblocker wie Amlodipin oder Verapamil (bei Clusterkopfschmerz) geeignete Allopathika zu sein.

# Autoimmunität

- ▶ Autoimmunerkrankungen können verstärkt werden (33,96)
- ▶ Hyperinflammation -> erschöpftes Immunsystem -> Dysregulation des Immunsystems -> Bildung von Autoantikörper gegen Autoantigene (33,96)
- ▶ Paleo-Auto-Immun-Protokoll
- ▶ Quercetin (97), EGCG (98), Resveratrol (99), Berberin (100), Vitamin C (101), EPA/DHA (102), Vitamin D (103), Vitamin E (104), Selen (56), Zink (27), Alpha-Liponsäure (105)
- ▶ Autoimmunreaktionen durch Störung des Eisenstoffwechsels und Ferroptose (106)

# Eisenstoffwechsel/ Ferroptose

- ▶ Covidin „das Spike-Peptid“ - der Doppelgänger des Hormon Hepcidin? (107)
- ▶ Intrazelluläre Eisenakkumulation
- ▶ Reaktivierung opportunistischer (eisenliebender) Viren
- ▶ Oxidativer Stress -> Zellschäden -> Ferroptose (108,109)
- ▶ Ferroptose = Eiseninduzierte proinflammatorische Nekrose mit Glutathionabbau und Lipidperoxidation der Membranlipide
- ▶ Die Entzündungen aktivieren wiederum NF-kappa-B, IL-1-beta, IL-6, und TNF-alpha (110,111)
- ▶ Ferroptose kann zahlreiche Krankheiten begünstigen, darunter neurodegenerative Erkrankungen, Lungenerkrankungen, Krebs, Herzrhythmusstörungen, Muskelerkrankungen, Typ-2-Diabetes, Endometriose, entzündliche Darmerkrankungen, Nierenschäden, Schlaganfall und Hirnblutungen (84,106,108,111-120)

# Eisenstoffwechsel regulieren

- ▶ Erhöhung des intrazellulären Glutathionspiegels
- ▶ Schutz vor oxidativem Stress/ Abbau der Lipidperoxidation
- ▶ Eisenchelatbildung (Einfangen freier Eisenionen) durch Lactoferrin
- ▶ Quercetin, Zink und Vitamin E können Ferroptose hemmen (40,84,116,117)
- ▶ Opportunistische Viren abbauen
- ▶ Regulation der Eisenhämmostase und Eisenchelatbildung:  
Lactoferrin (121,122), Curcumin (18), Quercetin (18,123,124) Alpha-Liponsäure (18), EGCG (20,125), Berberin (126)
- ▶ Hemmung der Ferroptose:  
Ubiquinol (84,115,117), Vitamin E (26,40,84,109,127), Zink (116), Quercetin (124), DHA (128), Vitamin K (129), Astaxanthin (84,130), Curcumin (124,125,131), Selen (109)
- ▶ Glutathionkonzentration erhöhen: N-Acetylcystein (115,132), Glutathion, Curcumin, Quercetin (133)

# Mitochondriale Dysfunktion & Oxidativer Stress

- ▶ Covid, PC & PV kann als erworbene Mitochondriopathie gedeutet werden (35,67,68,69-79)
- ▶ Chronische Müdigkeit, Immundysfunktion, Muskelschwäche, allgemeine Schmerzen, Schlafprobleme, Depression, vaskuläre Probleme, mentale und neurologische Beschwerden (9,35,63,70-74,81,82)
- ▶ Störung der mitochondriale Funktionen
  - ▶ Energieproduktion, Kalzium- und Eisenhömostase
  - ▶ Freisetzung reaktiver Sauerstoffradikale (oxidativer Stress)
- ▶ Labor: Oxidativen Stress und intrazelluläres ATP

Ärztlicher Befundbericht			
Untersuchung	Ergebnis	Einheit	Referenzbereich
ATP intrazellulär	1.56	µM	> 2.5
Vermindertes intrazelluläres ATP als Hinweis auf eine sekundär gestörte Mitochondrienfunktion der Leukozyten.			

# PGC-1-alpha & Nrf2

- ▶ Die „mitochondriale Qualitätskontrolle“ erfolgt durch den Transkriptions-Kofaktor PGC-1-alpha (peroxisome proliferator-activated receptor gamma coactivator 1-alpha) (72,83)
- ▶ Oxidativer Stress lässt sich durch Antioxidantien verringern. NAC scheint als Vorläufer vom intrazellulären Antioxidans Glutathion am wichtigsten.
- ▶ Die Regulation des antioxidativem Systems erfolgt durch den Transkriptionsfaktor Nrf2 (Nuclear Factor Erythroid 2-Related Factor 2) (5)
  - ▶ Nrf2 hilft Zellschäden zu reparieren (schaltet Gene, die über Glutathion, antioxidative Enzyme und Proteine zur Reparatur führen)
  - ▶ Nrf2 reguliert NF-kappa-B runter
  - ▶ Nrf2 aktiviert Phase-II-Entgiftungsenzyme
  - ▶ Nrf2 hemmt die Ferroptose (84)

# Empfehlung bei Mitochondriale Dysfunktion & Oxydativem Stress

- ▶ Ubiquinol (9,74,78), Alpha-Liponsäure (auch Eisenchelatbildung) (69,78,134), L-Carnitin/Acetyl-L-Carnitin (auch Eisenchelatbildung) (78,51), NAC (78,135), Vitamin C (78), Vitamin E (78), EGCG (136), Lactoferrin (17)
- ▶ Hochregulation von PGC-1-alpha: Quercetin (137), Resveratrol (138), Ubiquinol, Alpha-Liponsäure, L-Carnitin/Acetyl-L-Carnitin, Curcumin (139,140), EGCG (136), Vitamin C (78), Vitamin E (78), Taurin (kann auch Muskelabbau hemmen) (141,142)
- ▶ Hochregulation von Nrf2: Alfa-Liponsäure (144), Quercetin (145), Curcumin (146), Vitamin E (147), Resveratrol (148), EGCG (20,149), Boswellia-Extrakt (150,151), EPA/DHA (4,5), Vitamin D (152,153), N-Acetylcystein (8), Taurin (8), Ashwagandha (154), Astaxanthin (14,84,155), Berberin (156,157), Ginkgo biloba (57)
- ▶ Mitochondriale Nährstoffe (143): Alle B-Vitamine, C, D, E und K2, Eisen, Kupfer, Magnesium, Mangan, Selen, Zink, EPA/DHA

# First line Post-Covid & Post-Vac (Stoßtherapie 8-14 Tage hoch dosiert)

- ▶ EPA/DHA tägl. 4 x 1g
- ▶ Vitamin C tägl. 4 x 1g
- ▶ N-Acetylcystein tägl. 60mg/kg -> Cave Histamin -> DAO
- ▶ Quercetin tägl. 2 x 300-400mg
- ▶ Pycnogenol tägl. 2 x 200-300mg
- ▶ Selen tägl. 10µg/kg
- ▶ Zink tägl. 1mg/1kg
- ▶ Ggf. Ambroxol (66) tägl. 3 x 5 ml (wenn pulmonal)
- ▶ Ggf. Aspirin tägl. 1mg/kg
- ▶ Ggf. Nattokinase tägl. 30-100 FU/kg -> Cave Quickwert

# Labor 1

## ► Der „preiswerte“ Anfang

- Gr. BB/ LDH/ GOT
- wrCRP/ Ferritin/ IL-6/ CD-8
- D-Dimer
- Troponin I
- SARS-CoV-2 AK



## Second line

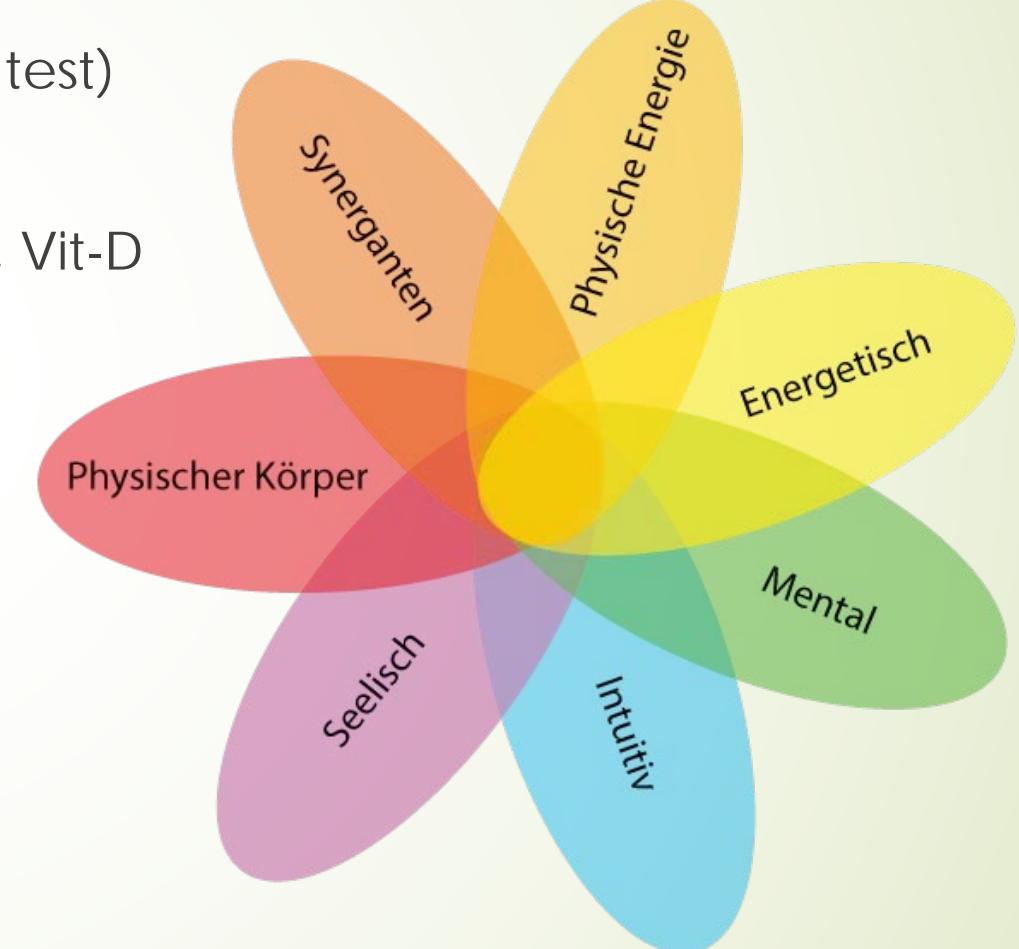
- ▶ Das selbe Programm mit  $\frac{1}{2}$  Dosierung für ca. 4-6 Wochen
- ▶ Zusätzlich Ernährungsberatung  
(Antientzündlich, Ketogen, Paleo Auto-Immun-Protokoll,...)
- ▶ Zusätzlich Trifaktoren und Polypheophole hochdosiert
  
- ▶ Eventuell Oxyvenierung oder Ozon-Hochdosis-Therapie
- ▶ Eventuell Infusionen
  - ▶ Curcumin, EGCG, Artesunat
  - ▶ Alpha-Liponsäure, Glutathione

# ...und dann?

## ► Labor 2

- Dünndarm-Analyse (Chromatest)
- T-Zell-Profil, Zytokin-Profil
- Mineralien i.V., AntiOx, PerOx, Vit-D
- ...

## ► ...und



# Weitere Hilfsmittel

- ▶ Oxyvenierung, Ozon-Therapie
- ▶ Höhentraining
- ▶ Infrarot, Biophotonen, Magnetfeld
- ▶ Apharese, Plasmapherese, Inuspherese



Höhentraining



Infrarot & Co



Inuspherese



Oxyvenierung

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# Effect of Angiotensin II on Bone Erosion and Systemic Bone Loss in Mice with Tumor Necrosis Factor-Mediated Arthritis

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## Beispiel Spike-Protein

