

# COPD: ein Patientenpfad

Prim. Priv.-Doz. Dr. A. Valipour, FERS

Austrian Health Forum  
Gastein 2024

# COPD: ein Patientenpfad



**Paul, geboren 1962**



**Eltern Raucher**



**Häufige Infekte in der Kindheit**



**“Asthma bronchiale” in der Jugend**





**Paul fängt mit 16 an zu Rauchen**



**“Asthma bronchiale” in der Jugend**



**Paul beginnt eine Schweißerlehre**





**Chronischer Husten  
Kurzatmigkeit beim Wandern**



**Diagnose COPD mit 53 Jahren**



**Paul hört mit dem Rauchen auf**





**Paul, geboren 1962**



**Kurzatmigkeit, Krankenstandstage,  
Exazerbationen, Spitalsaufenthalte**



**Verlust von 60% LUFU in 10 Jahren**

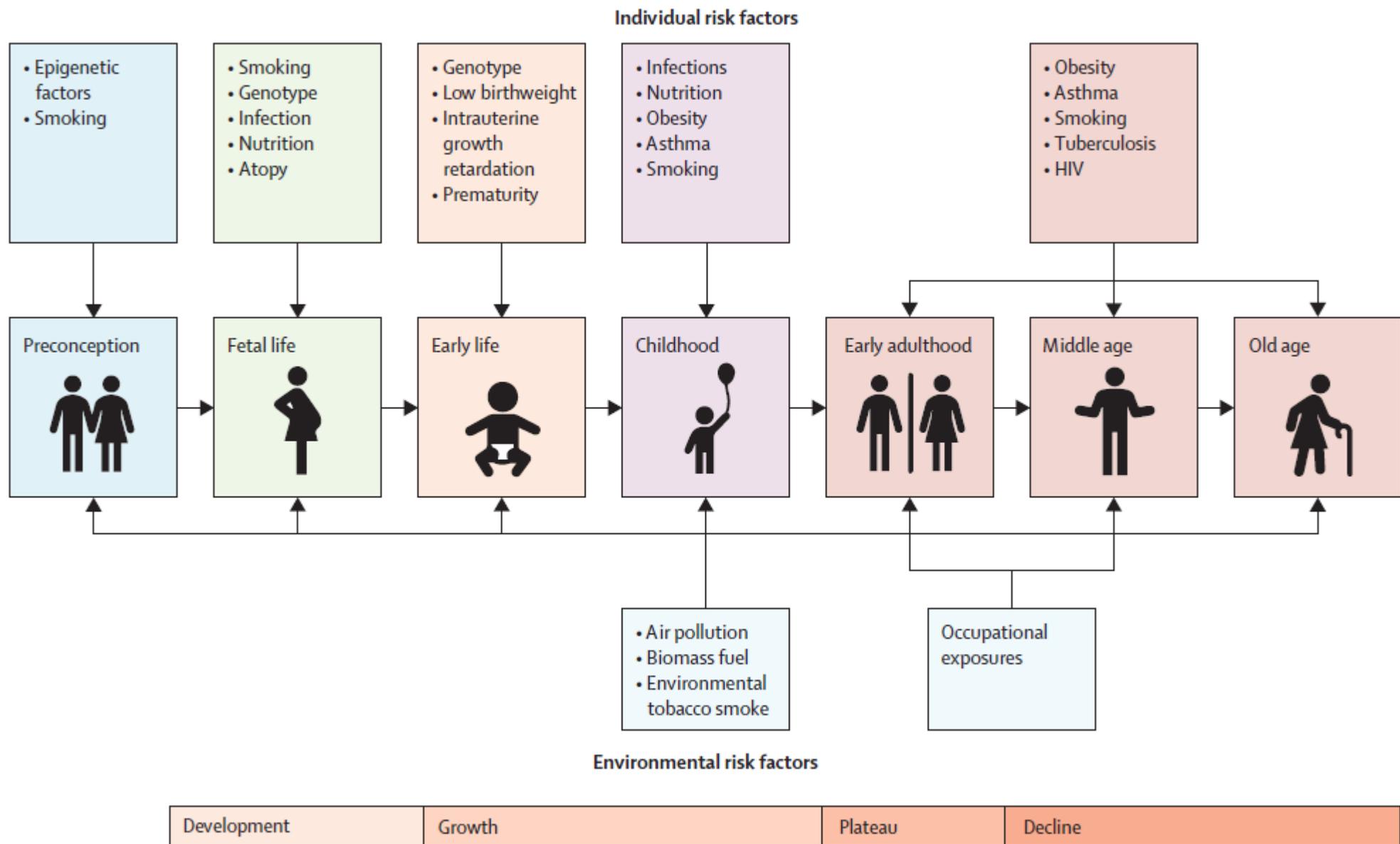


**Kardiovaskuläre Komorbiditäten**



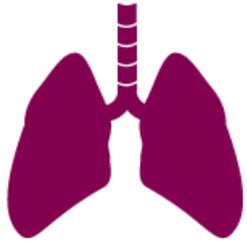
**Paul verstirbt 2023 im Rahmen einer  
Pneumokokken-Pneumonie**



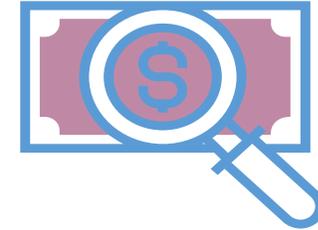


# COPD

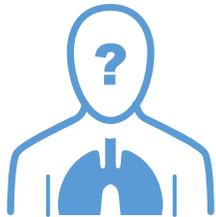
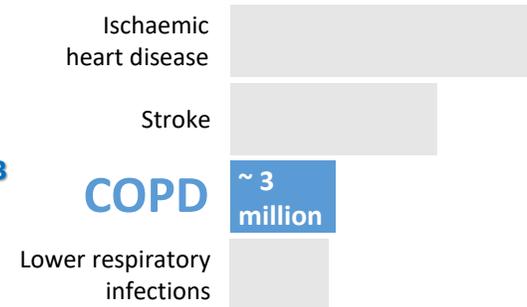
~384 Mio Menschen weltweit betroffen<sup>1</sup>



100 Mrd.\$ Krankheitskosten jährlich per <sup>1,3-5</sup>



COPD = 3. häufigste  
Todesursache weltweit<sup>13</sup>



Etwa die Hälfte der COPD Patient\*innen sind nicht diagnostiziert<sup>2</sup>



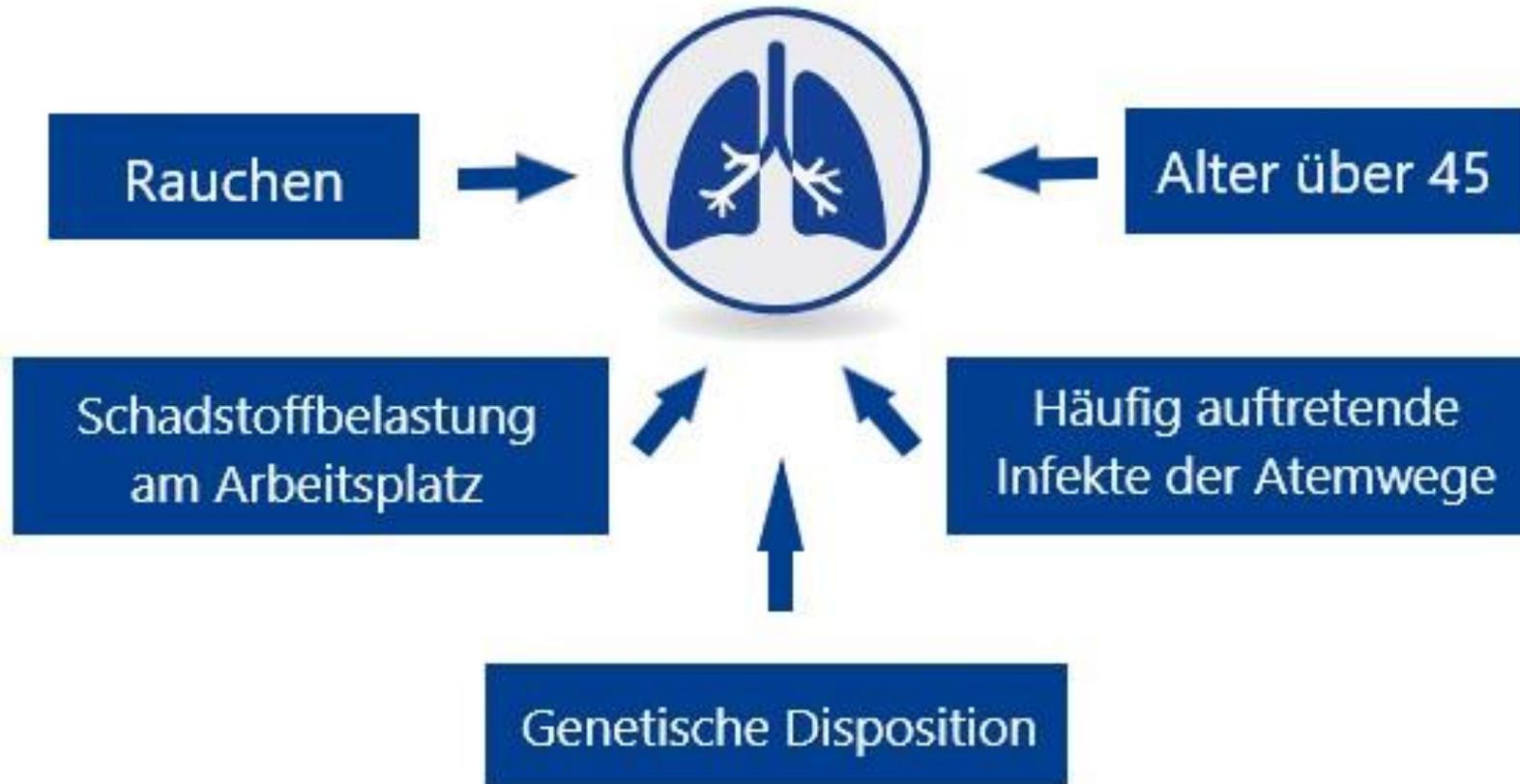
COPD Exazerbationen als Hauptfaktor für Morbidität und Mortalität<sup>1,6-12,a</sup>

<sup>a</sup>50-75% for services associated with exacerbations.<sup>8</sup> 1. GOLD. Global strategy for the diagnosis, management, and prevention of COPD: 2020 report; 2. Diab N et al. *Am J Respir Crit Care Med* 2018;198:1130-1139; 3. Ford ES et al. *Chest*. 2015;147:31-45; 4. Chen X et al. *Int J COPD*. 2016;11:2625-2632; 5. Nishimura S et al. *Respirology*. 2004;9:466-473; 6. Qureshi H et al. *Ther Adv Chronic Dis*. 2014;5:212-227; 7. Press VG et al. *Curr Opin Pulm Med*. 2018;24:138-146; 8. Celli BR et al. *Eur Respir J*. 2004;23:932-946; 9. Toy EL et al. *COPD*. 2010;7:214-228; 10. Anzueto A. *Eur Respir Rev*. 2010;19:113-118; 11. Geitona M et al. *Respir Med*. 2011;105:402-409; 12. Perera PN et al. *COPD*. 2012;9:131-141;

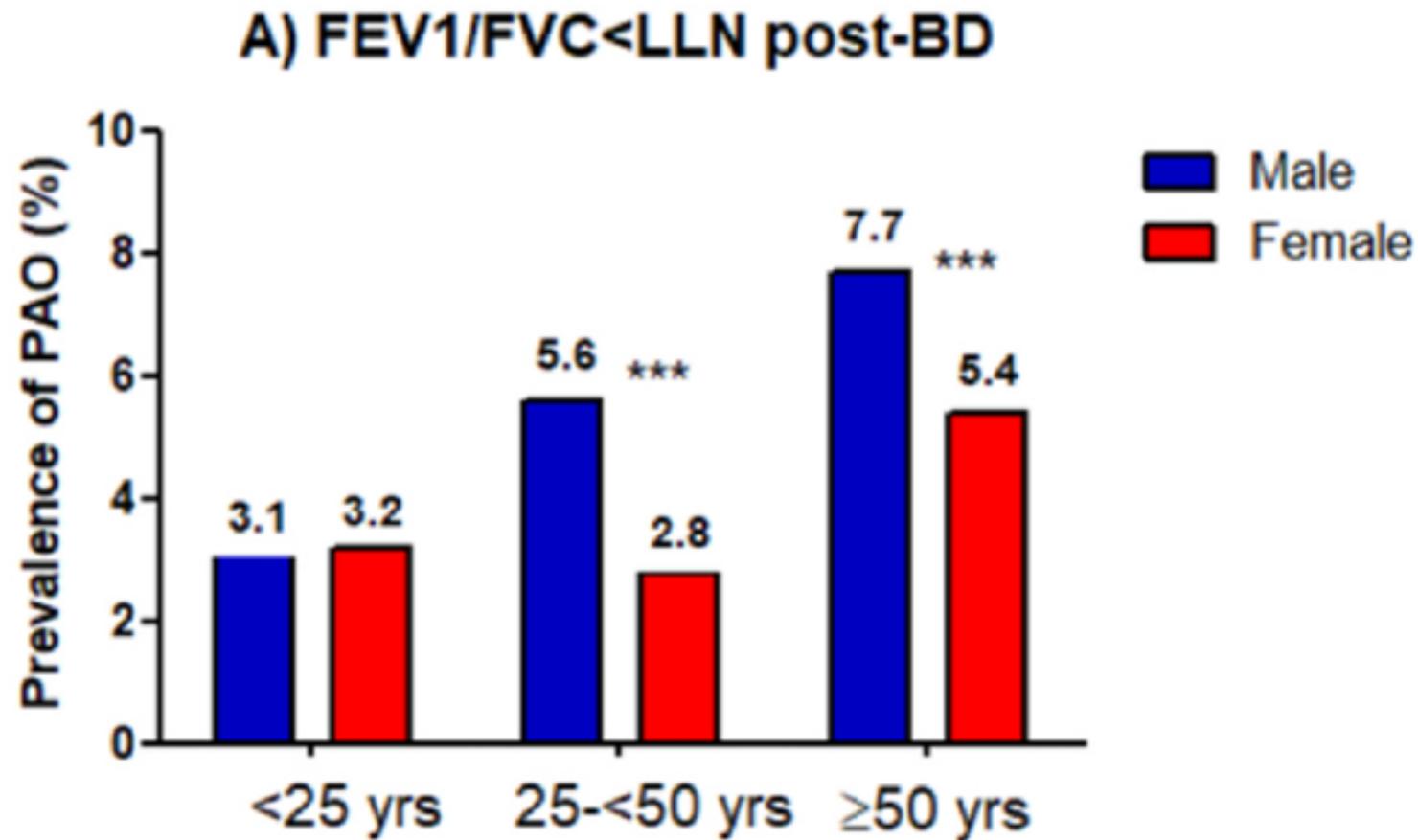
13. World Health Organization. The top 10 causes of death. <https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death>

# COPD:

## Die wichtigsten Risikofaktoren

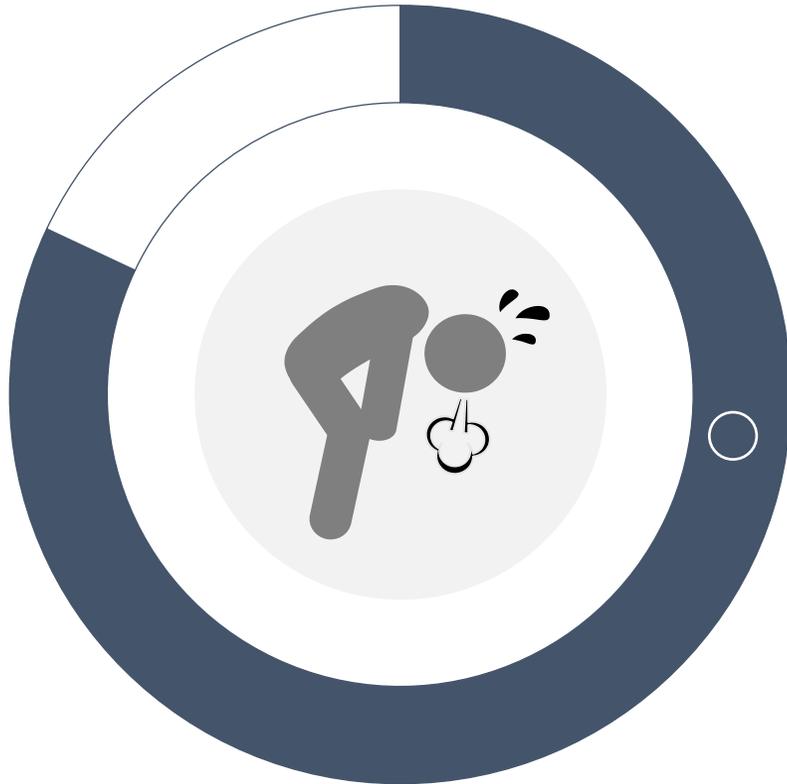


# Prävalenz der COPD in Österreich





# Leitsymptome der COPD



- **Dyspnoe**
- **Leistungseinschränkung**
- **Chronischer Husten ± Auswurf**

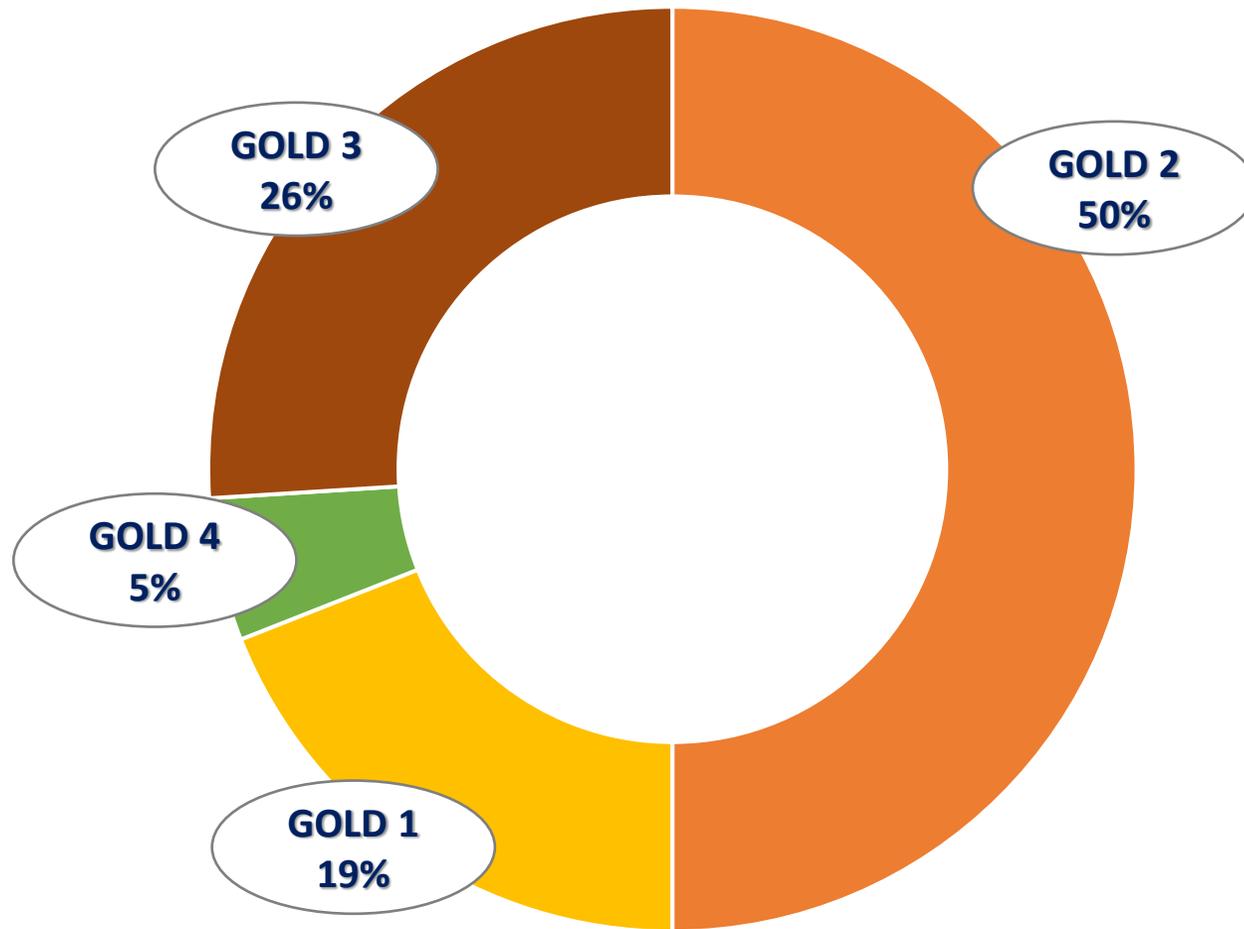
# Missed opportunities for COPD diagnosis in real-world clinical practice

**Within 5 years prior  
to diagnosis of COPD:**

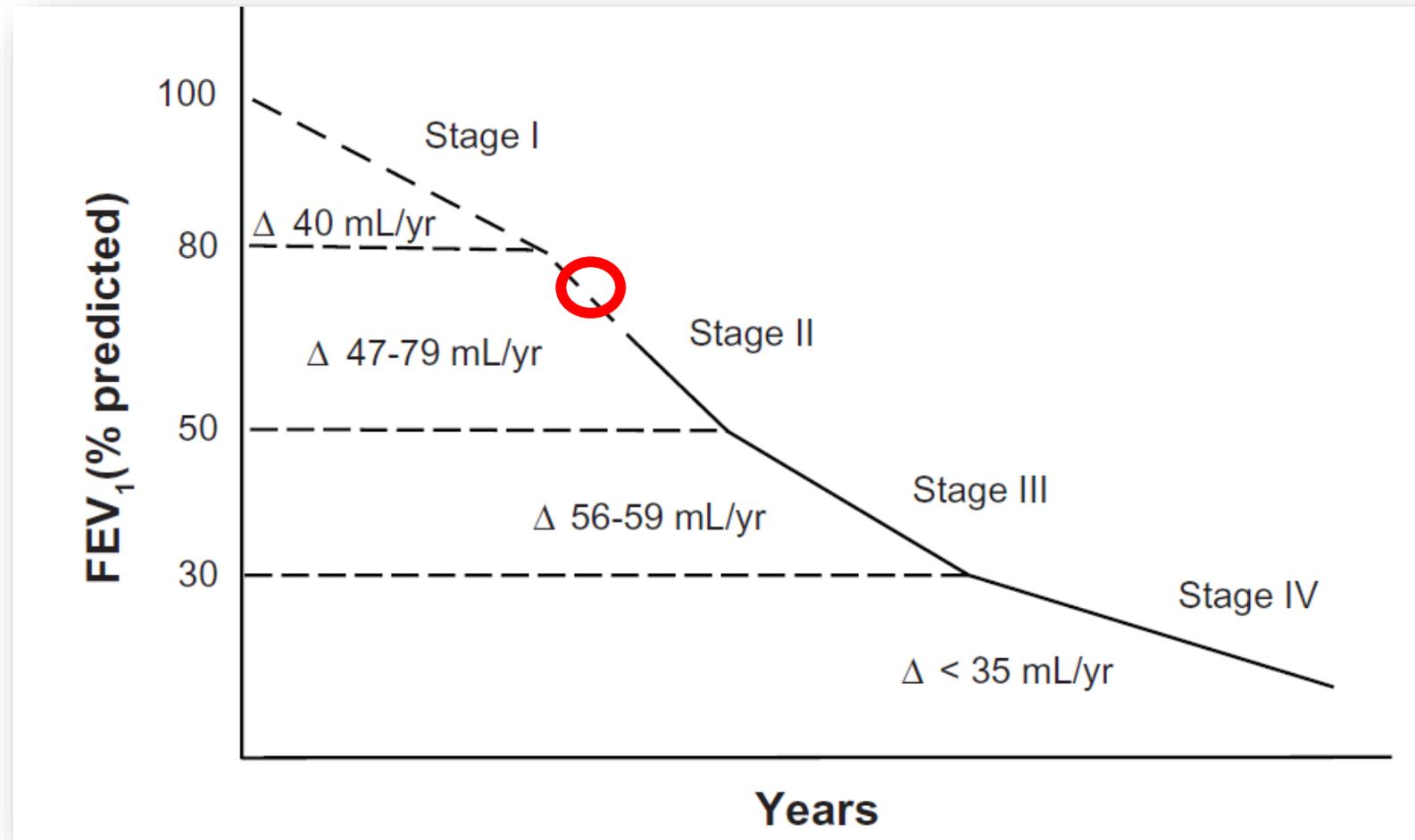
- **85% were seeing physicians  
because of respiratory problems**
- **40% received systemic steroids  
without diagnosis**

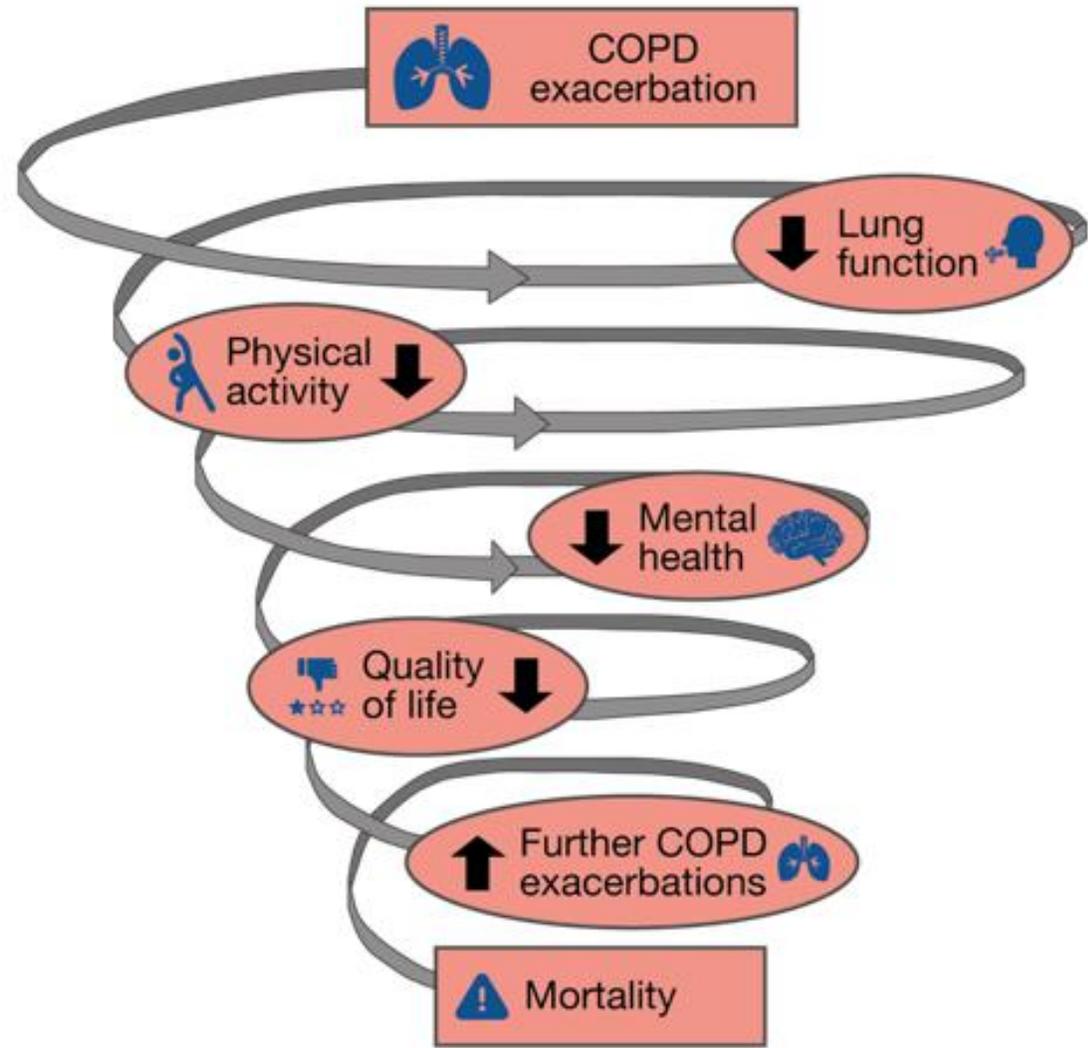


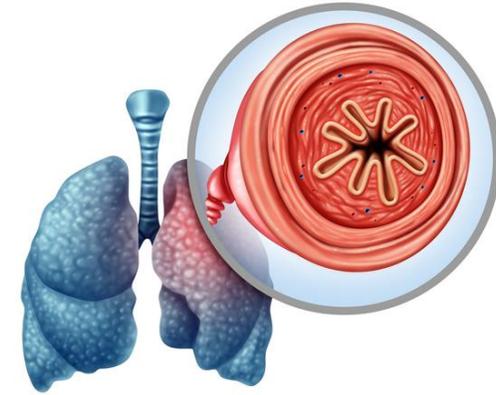
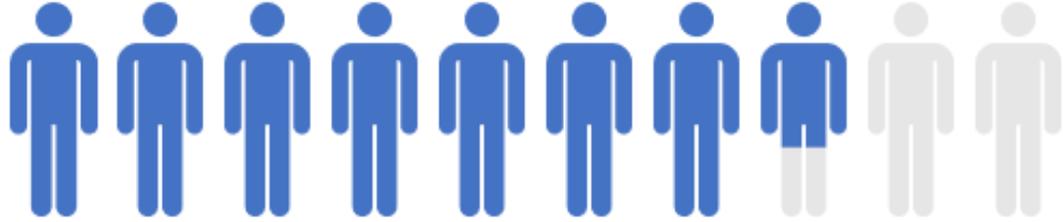
# Wenige Patienten werden im Frühstadium der COPD diagnostiziert



# Lungenfunktionsverlust bei COPD schneller im Frühstadium



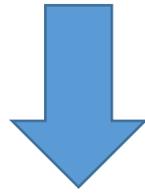




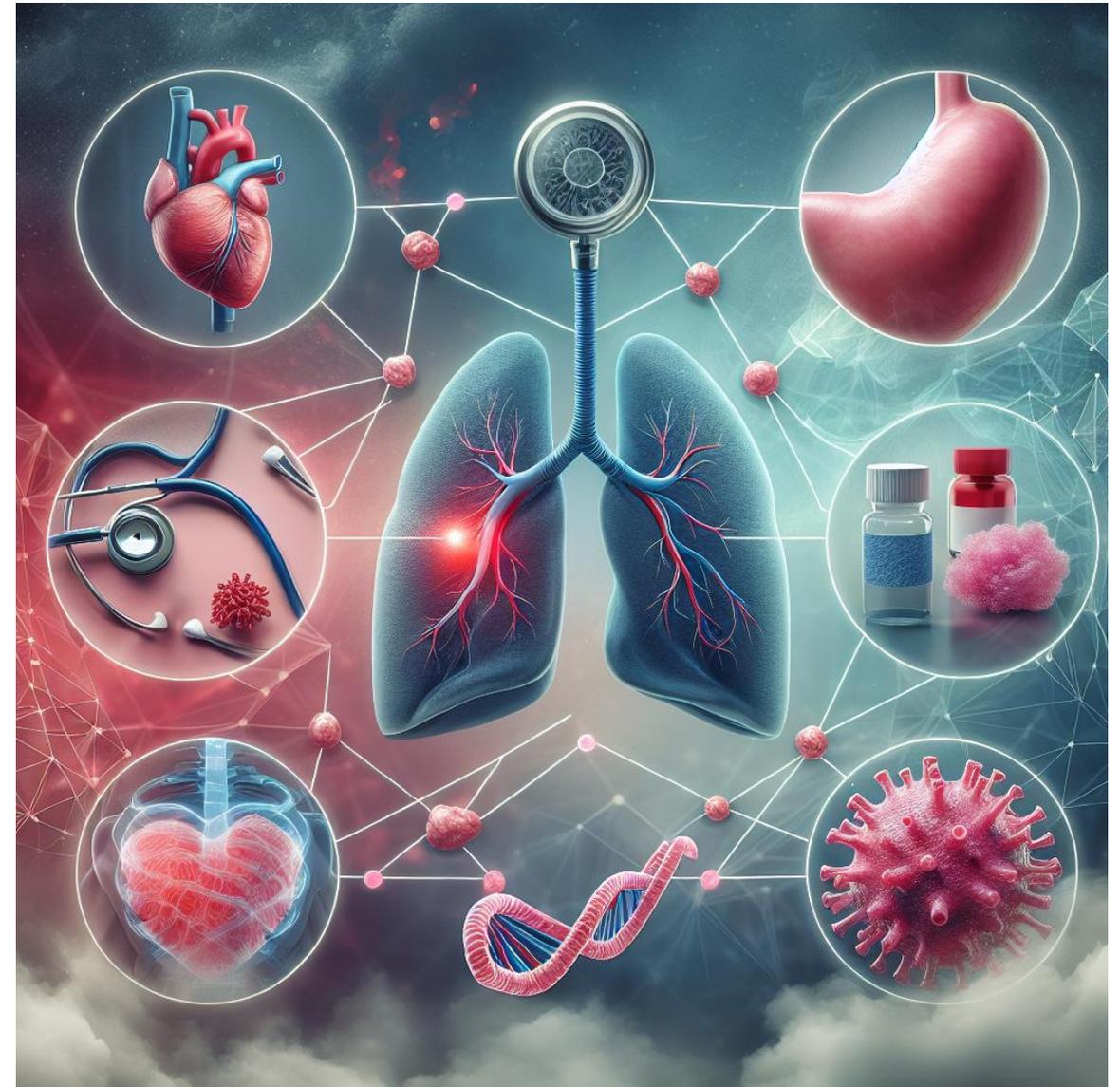
**Bis zu 77% aller Patient\*innen mit COPD haben innerhalb von 3 Jahren zumindest eine moderate oder schwere Exazerbation<sup>1</sup>**

1. Hurst JR et al. *N Engl J Med.* 2010;363:1128-1138;
2. Han MK et al. *Lancet Respir Med.* 2017;5:619-626
3. Tashkin DP et al. *N Engl J Med.* 2008;359:1543-1554.

# COPD



**Lungenkrebs**  
**Herzkreislaufkrankungen**  
**Osteoporose**  
**Depressio**  
**Lungenfibrose**  
**Gastroösophagealer Reflux**



# COPD

↓

## Verlust an (gesunden) Lebensjahren

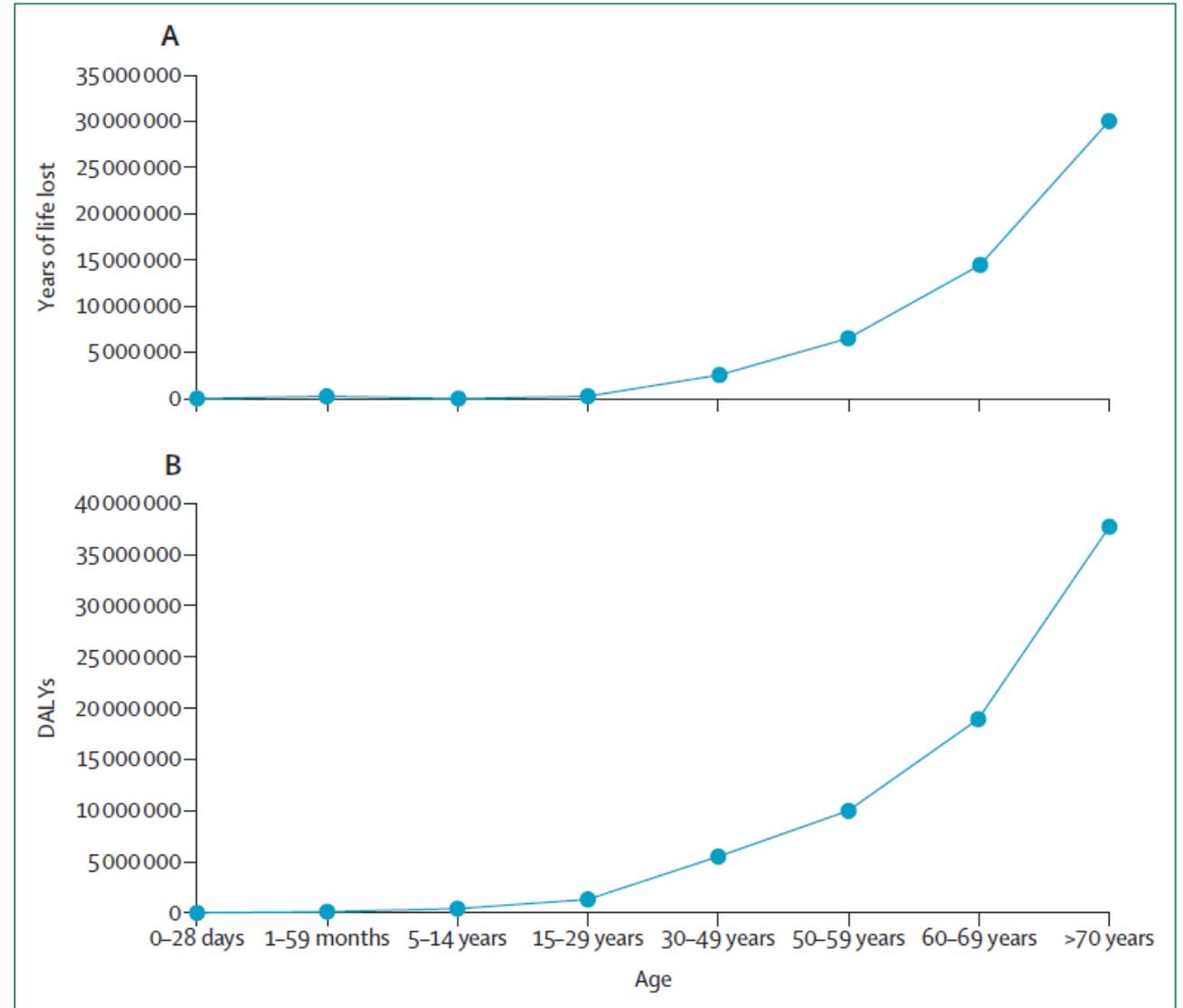
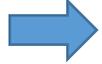


Figure 1: DALYs (A) and years of life lost (B) to COPD  
In 2019, COPD was the seventh leading cause of DALYs globally and the eighth leading cause of years of life lost.<sup>4</sup>

- **Aufklärung (KiGAs, Schulen,...)**  
**Raucherentwöhnung**  
**(Spezialambulanzen, Incentives, Vergütung,...)**
- **Arbeitsmedizin**



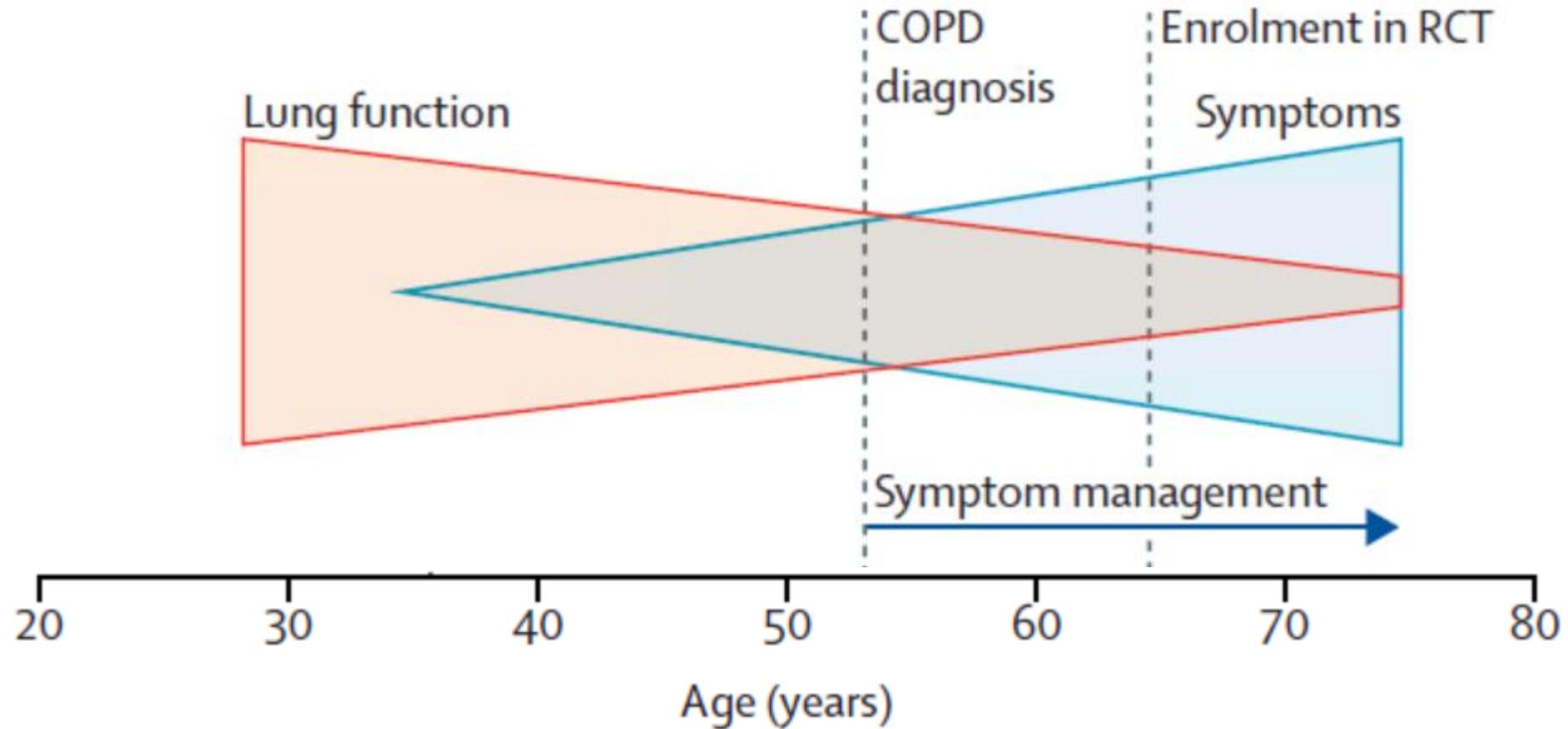
- **DMP**
- **Spezialambulanz COPD**
- **Management Komorbiditäten**
- **Palliative Care**

- **Sozialpolitik**
- **Perinatales Screening**
- **Raucherentwöhnung**  
**(Spezialambulanzen, Incentives, Vergütung,...)**

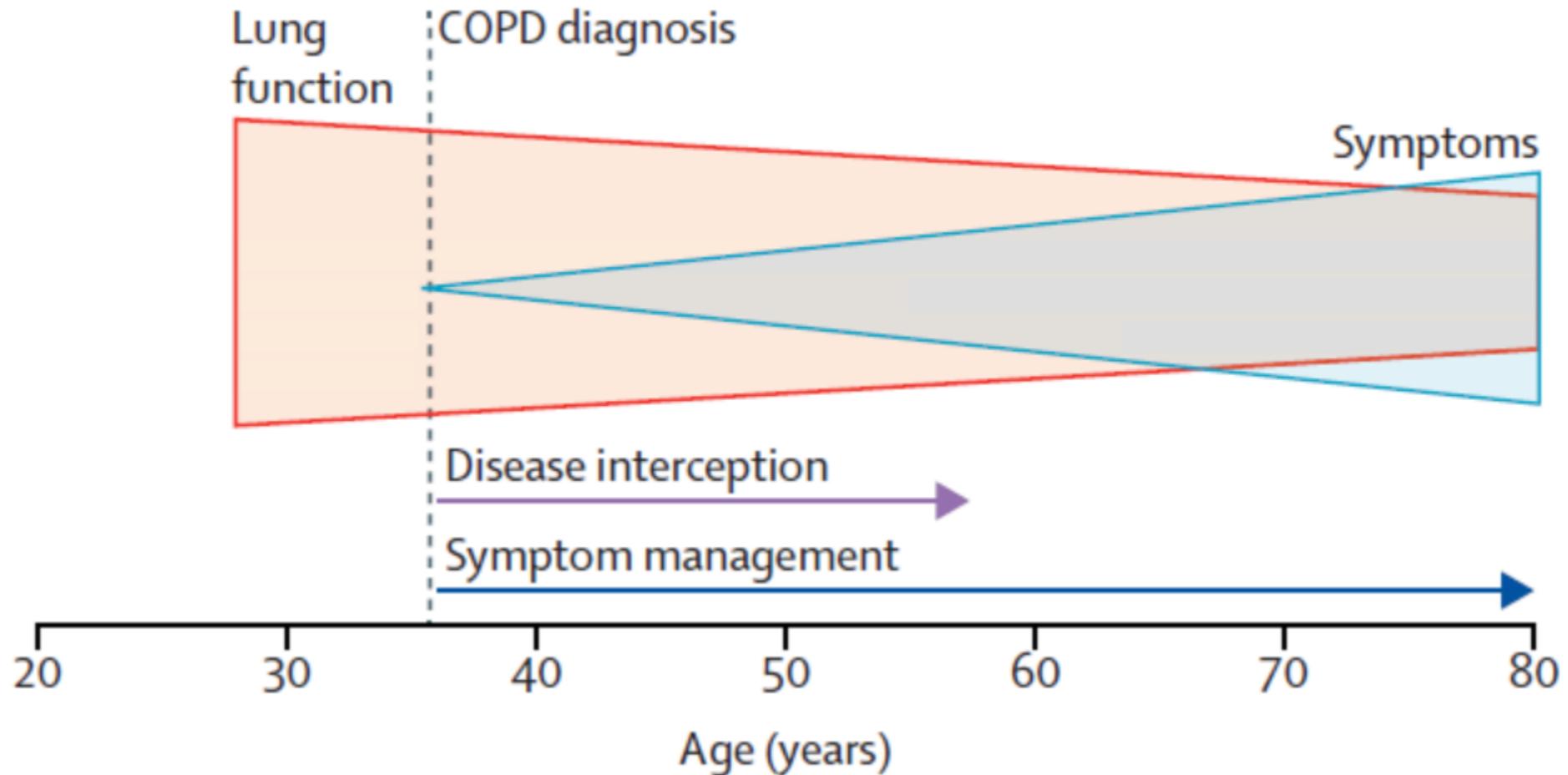
- **COPD-Früherkennung**
- **Disease Management (DMP)**
- **Lungenrehabilitation**

# COPD-Diagnose: aktuelle Situation

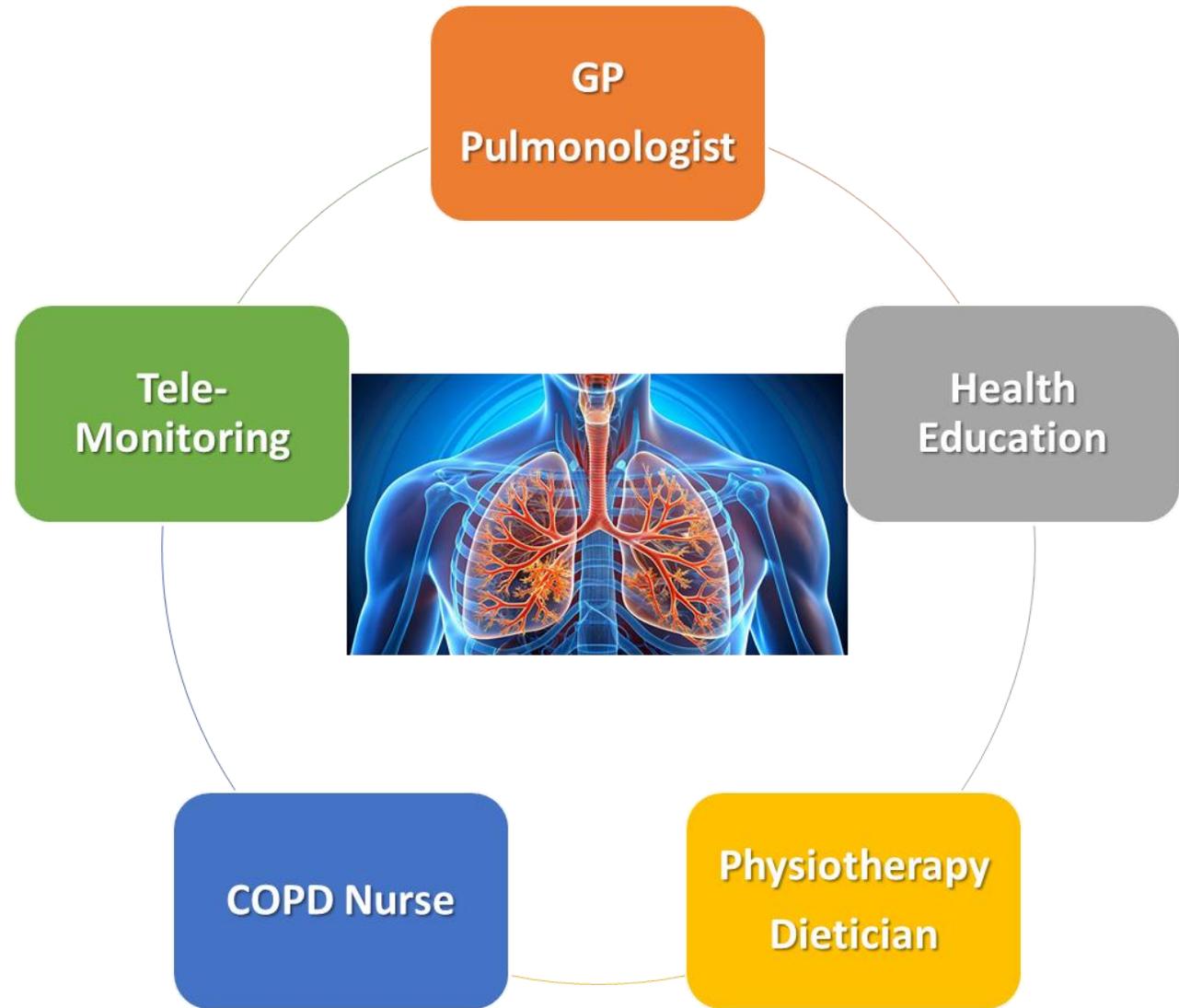
A



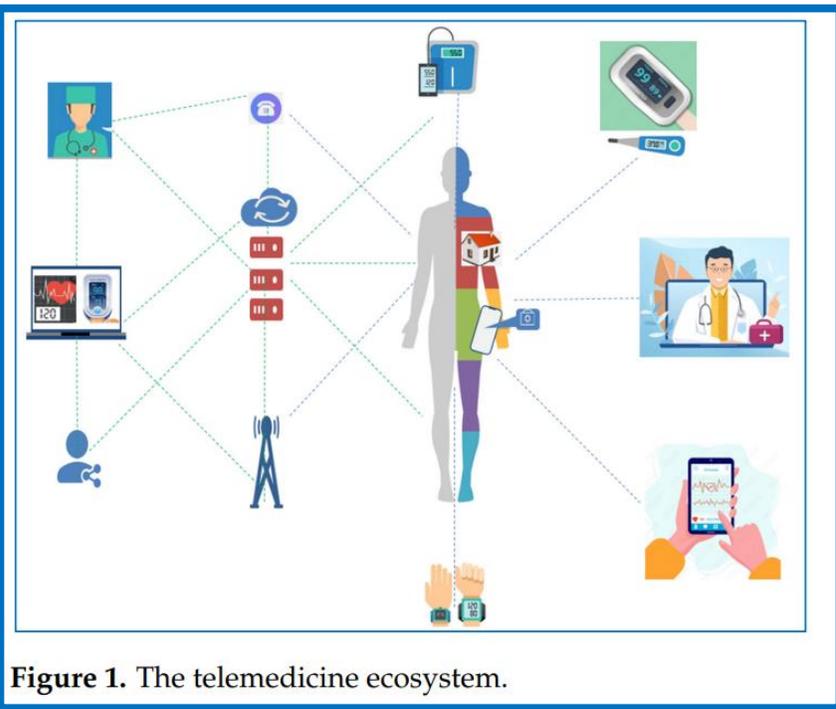
# COPD-Diagnose: Früherkennung wünschenswert



# Disease Management Program



# Telemedizinische Betreuung als Bestandteil des COPD- (Selbst)Managements



## Effectiveness of Telemonitoring for Reducing Exacerbation Occurrence in COPD Patients With Past Exacerbation History: A Systematic Review and Meta-Analysis

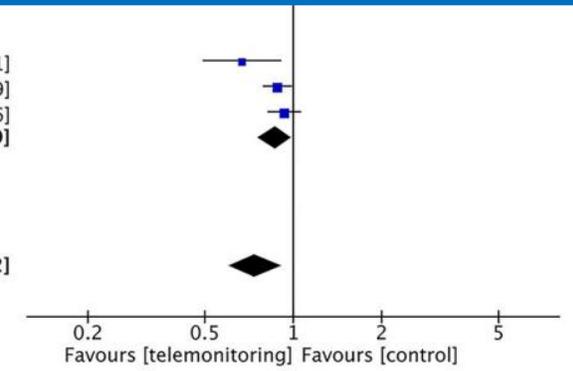
### 1.4.3 12 months

2006 Casas	29	65	60	90	17.1%	0.67 [0.49, 0.91]
2016 Vianello	170	230	87	104	24.9%	0.88 [0.79, 0.99]
2018 Kessler	112	157	124	162	24.3%	0.93 [0.82, 1.06]
<b>Subtotal (95% CI)</b>		<b>452</b>		<b>356</b>	<b>66.3%</b>	<b>0.87 [0.76, 0.99]</b>

Total events 311 271  
Heterogeneity:  $\text{Tau}^2 = 0.01$ ;  $\text{Chi}^2 = 4.00$ ,  $\text{df} = 2$  ( $P = 0.14$ );  $I^2 = 50\%$   
Test for overall effect:  $Z = 2.13$  ( $P = 0.03$ )

**Total (95% CI)** 690 591 100.0% **0.74 [0.60, 0.92]**

Total events 373 368  
Heterogeneity:  $\text{Tau}^2 = 0.04$ ;  $\text{Chi}^2 = 22.48$ ,  $\text{df} = 6$  ( $P = 0.0010$ );  $I^2 = 73\%$   
Test for overall effect:  $Z = 2.76$  ( $P = 0.006$ )  
Test for subgroup differences:  $\text{Chi}^2 = 2.30$ ,  $\text{df} = 2$  ( $P = 0.32$ ),  $I^2 = 13.2\%$



**26% Reduktion von Spitalsaufenthalten**

## Wildfire smoke impacts respiratory health more than fine particles from other sources: observational evidence from Southern California

[Rosana Aguilera](#) , [Thomas Corringham](#), [Alexander Gershunov](#) & [Tarik Benmarhnia](#)

### scientific reports

## Outcomes among patients with chronic obstructive pulmonary disease after recovery from COVID-19 infection of different severity

[Wang Chun Kwok](#), [Chi Hung Chau](#), [Terence Chi Chun Tam](#), [Fai Man Lam](#) & [James Chung Man Ho](#) 

[Scientific Reports](#) **14**, Article number: 13881 (2024) | [Cite this article](#)

## Ambient temperature and seasonal variation in inpatient mortality from respiratory diseases: a retrospective observational study

The Lancet Regional Health - Europe  
2023;35: 100757

[Hicham Achebak](#)<sup>a,b,\*</sup>, [Judith Garcia-Aymerich](#)<sup>b,c,d</sup>, [Grégoire Rey](#)<sup>a</sup>, [Zhaoyue Chen](#)<sup>b</sup>, [Raúl Fernando Méndez-Turrubiates](#)<sup>b</sup> and [Joan Ballester](#)<sup>b</sup>

### scientific reports

## Atmosphere particulate matter and respiratory diseases during COVID-19 in Korea

[Ji Young Hong](#), [Taemo Bang](#), [Sun Bean Kim](#), [Minwoo Hong](#) & [Jaehun Jung](#) 

[Scientific Reports](#) **14**, Article number: 10074 (2024) | [Cite this article](#)



via ChatGPT

**A.Valipour, MD**

**Klinik Floridsdorf**

**[arschang.valipour@gesundheitsverbund.at](mailto:arschang.valipour@gesundheitsverbund.at)**

**Twitter: @lungendoc**

