

# Ösophaguserkrankungen

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**Klinik Landstraße**

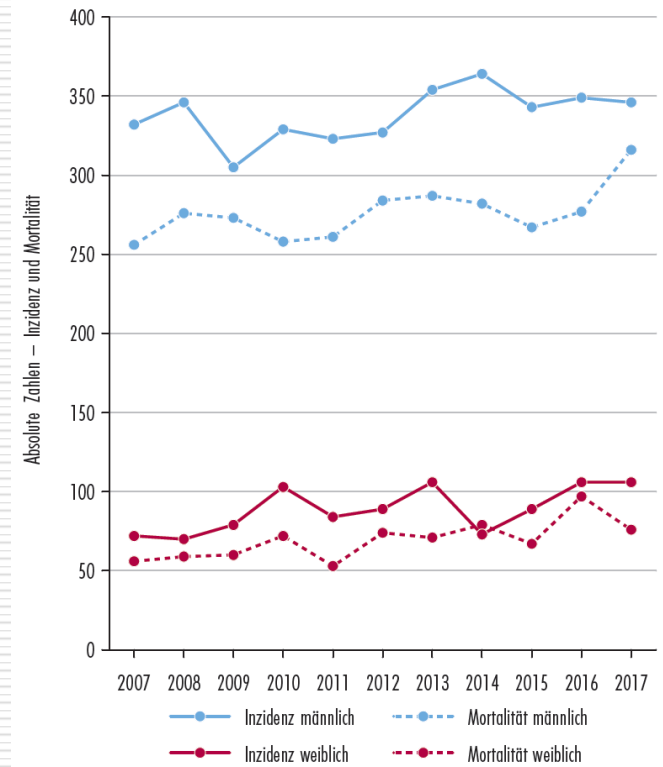
**&**

**Zentrum für Gastrointestinale Endoskopie , Klinik Favoriten**



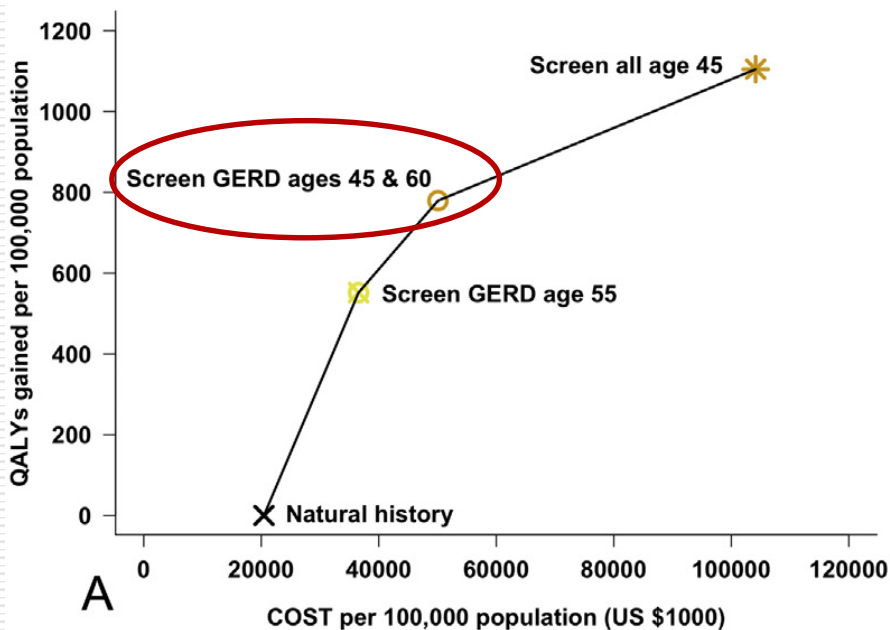
# Ösophaguskarzinom

- Inzidenz in Österreich leicht steigend
- Vor allem Adenokarzinom zunehmend
- Risikofaktoren für Barrett-Karzinom
  - (♂, Raucher, Long-segment Barrett, Ernährung↓)
- Neoadjuvante multimodale Therapie verbessert 5 Jahres Überleben (FLOT-Schema)



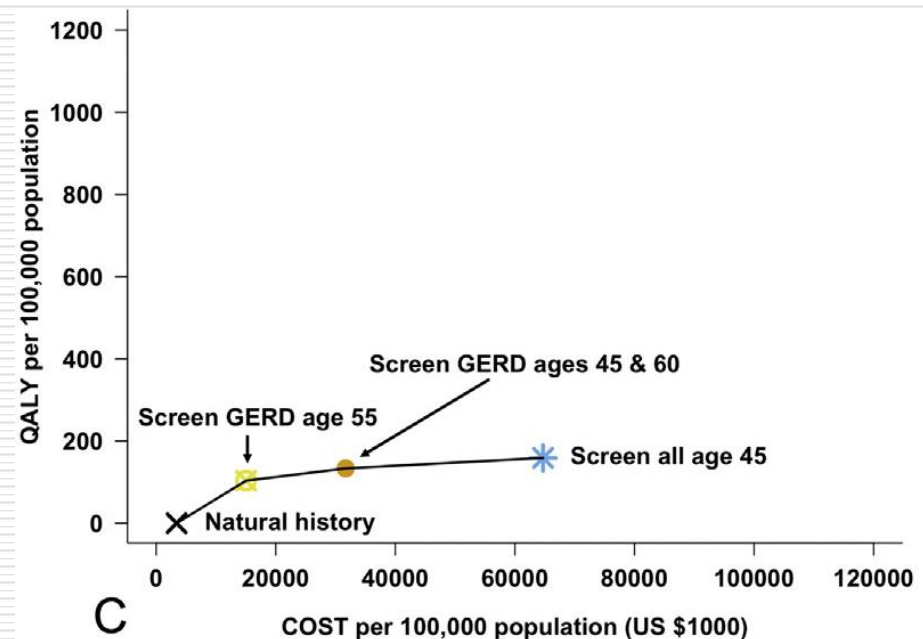
# Endoscopic Screening Program for Control of Esophageal Adenocarcinoma in Varied Populations: A Comparative Cost-Effectiveness Analysis

Weiße **Männer** mit GERD in USA



536 EAC deaths without screening

Weiße **Frauen** mit GERD in USA

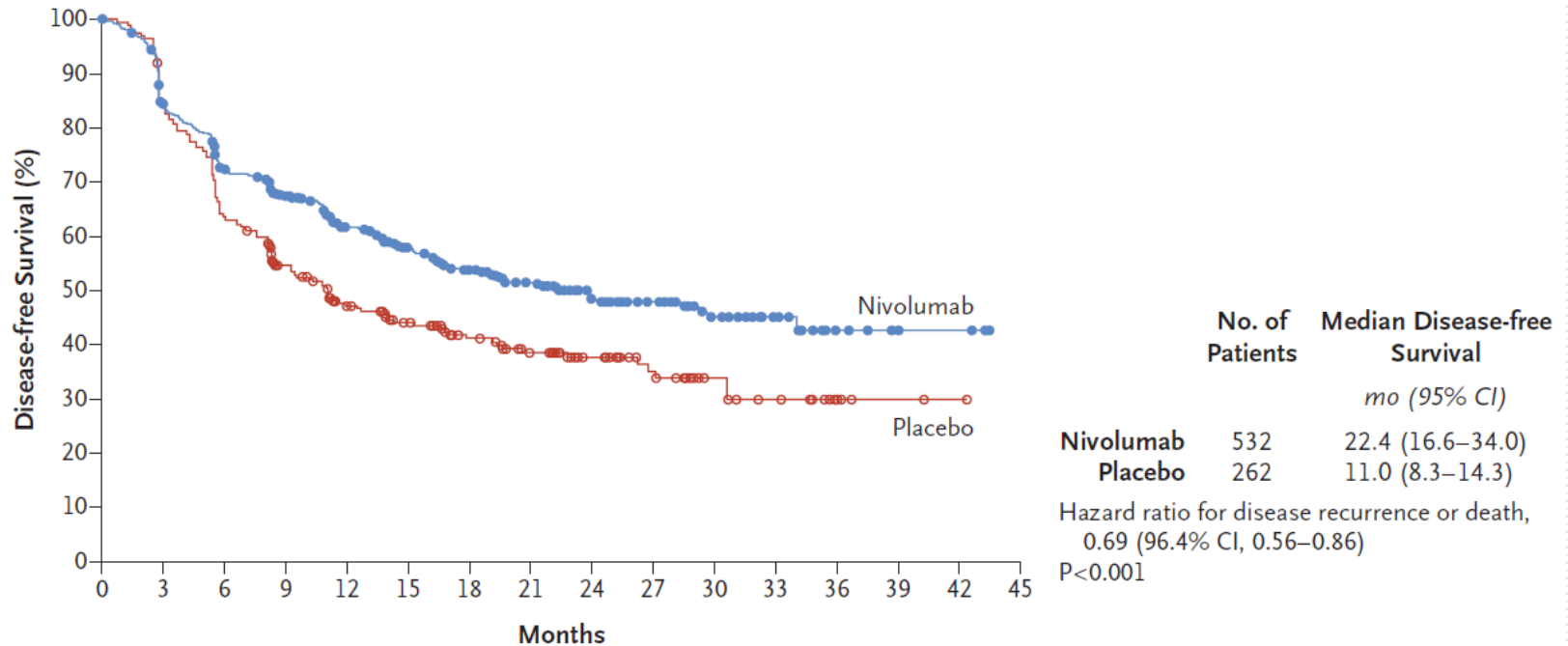


103 EAC deaths without screening

# Adjuvant Nivolumab in Resected Esophageal or Gastroesophageal Junction Cancer

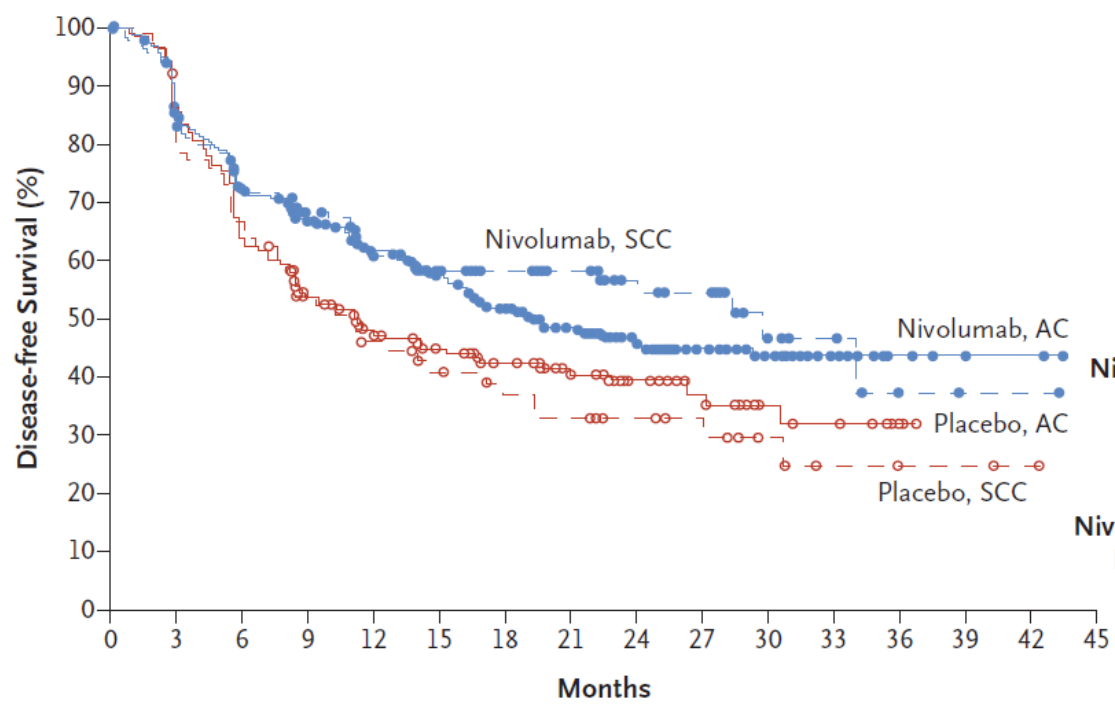
CheckMate 577 Studie, RCT doppel-blind, n=794; nach neoadj. RCT und R0 Resektion; Nivolumab (Checkpoint-Inhibitor; AK PD-1-Rezeptor; 16Wo alle 2Wo, dann alle 4Wo bis max.1a

Disease-free Survival in the Overall Population



# Adjuvant Nivolumab in Resected Esophageal or Gastroesophageal Junction Cancer

Disease-free Survival According to Histologic Type



	No. of Patients	Median Disease-free Survival mo (95% CI)
<b>Nivolumab, AC</b>	376	19.4 (15.9–29.4)
<b>Placebo, AC</b>	187	11.1 (8.3–16.8)
Hazard ratio for disease recurrence or death, 0.75 (95% CI, 0.59–0.96)		
<b>Nivolumab, SCC</b>	155	29.7 (14.4–NE)
<b>Placebo, SCC</b>	75	11.0 (7.6–17.8)
Hazard ratio for disease recurrence or death, 0.61 (95% CI, 0.42–0.88)		

AC: Adenokarzinom, SCC: Plattenepithelkarzinom

# Eosinophile Ösophagitis

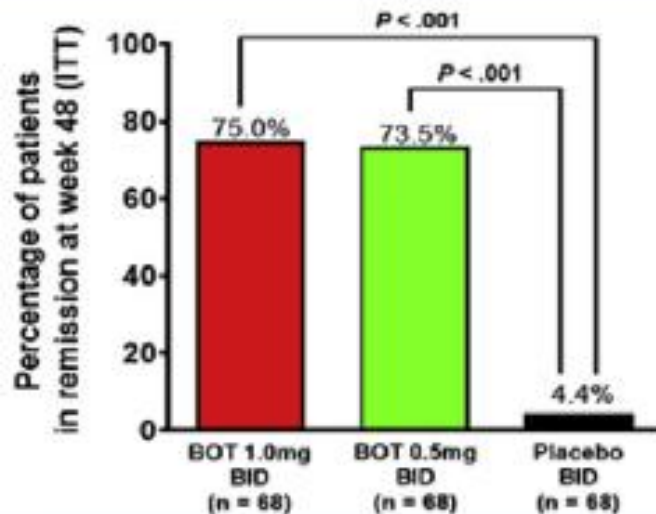
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- ❑ **Chronische eosinophile Inflammation** (fokal; immun-mediiert)
  - ❑ Kinder und jüngere Erwachsene (Peak: 30 -50a), Männer 2–3fach höher
  - ❑ Zweithäufigste entzündliche Erkrankung der Speiseröhre
  - ❑ Genetik + Umweltfaktoren; Assoziation: Rhinitis, Asthma, Ekzem
  - ❑ Häufigste Ursache für Dysphagie u. Bolusobstruktion (Erwachsene)
  - ❑ eher **progredienter Verlauf**, Strikturen (fibrostenotisch), Motilitätsstörungen
  - ❑ Diagnose: >15 eosinophile Granulozyten/hpf; „patchy disease“, 6 Biopsien
  - ❑ Gastroskopie: 70-90% Veränderungen (EREFS-Score)
  - ❑ Therapie: 3D`s: **D**rugs (PPI, topisches Budesonid) **D**iet, **D**ilatation
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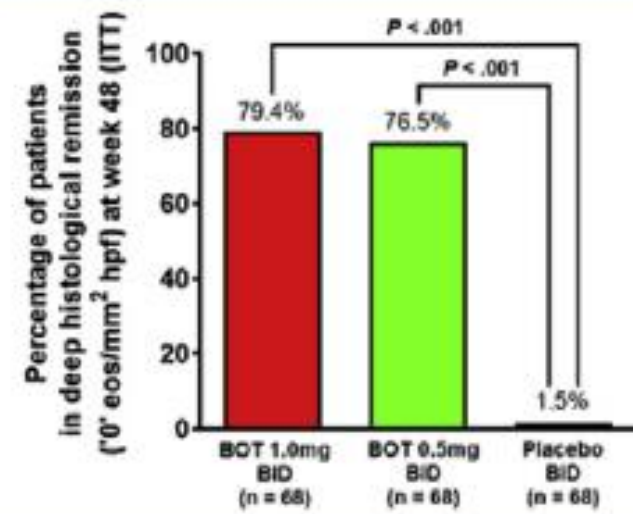
# Budesonide Orodispersible Tablets Maintain Remission in a Randomized, Placebo-Controlled Trial of Patients With Eosinophilic Esophagitis

N=204 mit EoE und klinischer und histologischer Remission 29 Zentren in EU

## Maintaining remission (1° endpoint)



## Deep Histological remission

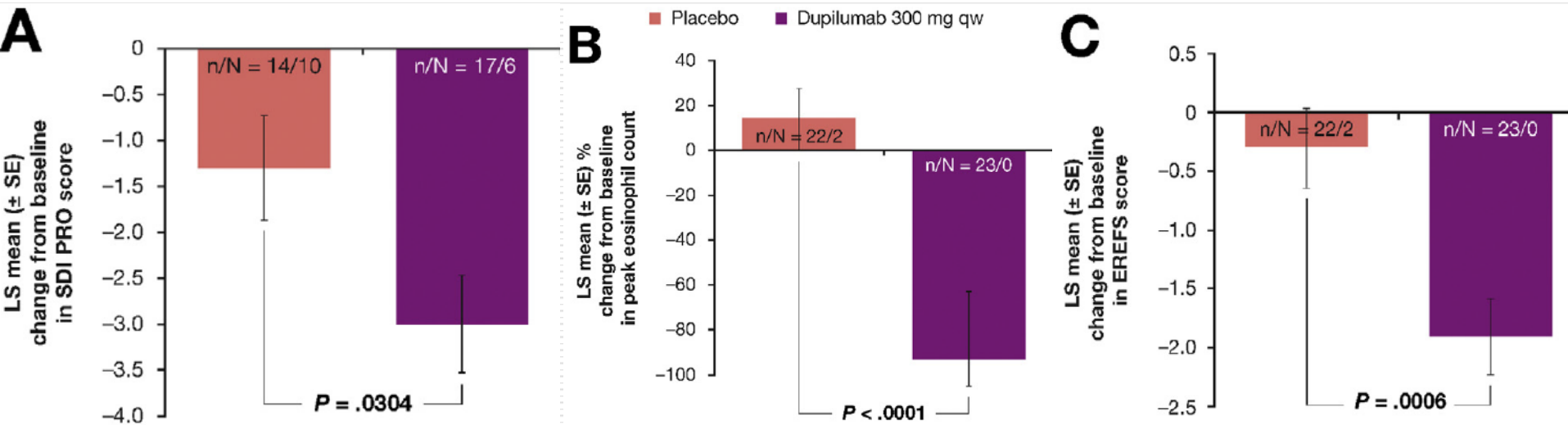


Mediane Zeit bis zum  
Relapse: 87d

Straumann A, Gastroenterology 2020

# Efficacy of Dupilumab in a Phase 2 Randomized Trial of Adults With Active Eosinophilic Esophagitis

N=47; 1x/Wo s.c. 300mg Dupilumab (Dupixent®)  
monokl. AK gegen IL4 Rezeptor (Hemmung IL4/IL13)





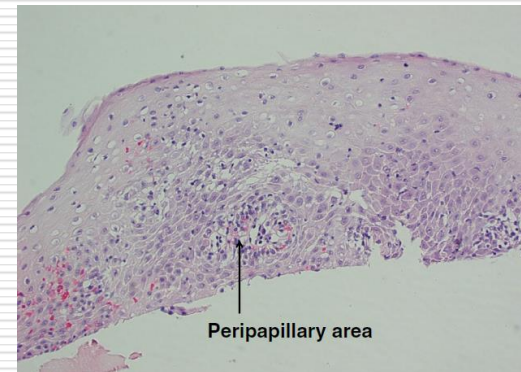
# Lymphocytic esophagitis: An Australian (Queensland) case series of a newly recognized mimic of eosinophilic esophagitis

exzessive Infiltration von Lymphozyten in Submukosa (50–80/HPF) d. mittleren und oberen Ösophagus ohne Eosinophile/Neutrophile Granulozyten

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Total number	62
Median age (age range)	55 (1–85 years)
Men	37 (60%)
Major clinical manifestations	
Dysphagia	32 (51%)
Epigastric/abdominal pain	8 (13%)
GERD	8 (13%)
Associated with Crohn's disease	8 (13%)

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47% Endoskopische Veränderungen wie bei EoE  
LoE assoziiert mit prim. Motilitätsstörung

Therapie: Versuch PPI, Budesonid

# Gastroösophageale Refluxerkrankung

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- Häufigste Gastrointestinale Diagnose im ambulanten Bereich
  - US: Inzidenz 15 to 20% der erwachsenen Bevölkerung
  - Deutlich steigende Prävalenz in westlichen Industriestaaten
  - Zahlreiche extraösophageale Manifestationen (Laryngitis, chron. Husten,..)
  - Imbalanz zwischen
    - Aggressivität des gastralen Refluxat in die Speiseröhre
    - und Versagen protektiver Mechanismen, vor allem unterer Ösophagussphinkter (Hiatushernie, Motilitätsstörung, erhöhter abdom. Druck, Sport, Alter, Medikamente)
-







# Use of proton pump inhibitors to treat persistent throat symptoms: multicentre, double blind, randomised, placebo controlled trial

N=346; 8 HNO-Ambulanzen in U.K. persist. (>6Wo) unerklärbare „Hals-Symptomatik“ (Heiserkeit, Globus-Gefühl, Schleim, Husten)  
 Lansoprazol 2x30mg für 16 Wo. vs Placebo  
 HZP: Reflux Symptom Index (RSI) Score nach 16 Wo

Questionnaires and intervention	No in group	Mean score at follow-up (95% CI)		
		Baseline	16 weeks*	12 months
RSI*:				
Lansoprazole	102	22.0 (20.4 to 23.6)	17.4 (15.5 to 19.4)	16.0 (13.6 to 18.4)
Placebo	118	21.7 (20.5 to 23.0)	15.6 (13.8 to 17.3)	13.6 (11.7 to 15.5)
Differencet		0.3 (-1.7 to 2.3)	1.8 (-0.8 to 4.4)	2.4 (-0.6 to 5.4)
RSI-HB:				
Lansoprazole	102	20.3 (18.8 to 21.7)	16.3 (14.5 to 18.1)	14.7 (12.4 to 16.9)
Placebo	118	19.8 (18.6 to 21.0)	13.9 (12.2 to 15.5)	11.9 (10.1 to 13.7)
Differencet		0.5 (-1.4 to 2.4)	2.4 (-0.0 to 4.8)	2.8 (0.5 to 5.1)

RSI=reflux symptom index; RSI-HB=laryngopharyngeal RSI items without the heartburn score;

# AGA Clinical Practice Update on De-Prescribing of Proton Pump Inhibitors: Expert Review

	<u>Definitely indicated for long-term use (&gt;8 wk)</u>	<u>Conditionally indicated for long-term use</u>	<u>Not indicated for long-term use</u>
   	Barrett's esophagus Clinically significant (LA Classification grade C/D) erosive esophagitis Esophageal strictures from GERD (ie, peptic strictures) Zollinger-Ellison syndrome Eosinophilic esophagitis Gastroprotection in users of ASA/nonsteroidal anti-inflammatory drug at high risk for GI bleeding Prevention of progression of idiopathic pulmonary fibrosis	 PPI-responsive endoscopy-negative reflux disease, with recurrence on PPI cessation PPI-responsive functional dyspepsia, with recurrence on PPI cessation PPI-responsive upper airway symptoms ascribed to laryngopharyngeal reflux, with recurrence on PPI cessation Refractory steatorrhea in chronic pancreatic insufficiency with enzyme replacement Secondary prevention of gastric and duodenal peptic ulcers with no concomitant antiplatelet drugs	Symptoms of nonerosive reflux disease with no sustained response to high-dose PPI therapy Functional dyspepsia with no sustained response to PPI therapy Steroid therapy in the absence of ASA/nonsteroidal anti-inflammatory drug therapy Prevention of recurrent upper GI bleeding from causes other than: Peptic ulcer disease, including gastric and duodenal erosions Erosive esophagitis 

# AGA Clinical Practice Update on De-Prescribing of Proton Pump Inhibitors: Expert Review

## PPI bei gastroösophagealer Refluxerkrankung

1. Pat. mit PPI – **regelmäßige Überprüfung**
2. **Komplizierte GERD** (Ulkus, Striktur, schwere erosive Ösophagitis) – PPI Dauertherapie
3. **Barrett - Ösophagus** – Kein Absetzversuch
4. Bei chron. 2x tgl. PPI-Therapie – **step-down auf 1x täglich**
5. **Ohne klare Indikation** – PPI Absetzversuch
6. Bei Absetzen einer chron. PPI Therapie – **Hinweis auf Säure-Rebound**
7. Bei PPI Absetzen: **Dosis Tapering** oder sofortiger Stopp
8. PPI Absetzen wegen fehlender Indikation – **nicht wegen Sorge vor PPI-assoziierten NW**

# Barrett Esophagus

- ❑ Prävalenz in der Allgemein-Bevölkerung 1,3 -1,6% (EU), 8,5% (US > 50a)
- ❑ Risikofaktoren: Reflux Symptomatik, Alter, Männer, Kaukasier, Rauchen, Stamm-Adipositas pos. Familienanamnese
- ❑ Risikofaktor für Adenokarzinom des Ösophagus
- ❑ ↑ Adenokarzinom Inzidenz in den letzten 40a um 600% (5a-Survival < 20%)

Grade of dysplasia	Risk of progression to high-grade dysplasia/ esophageal adenocarcinoma	Recommendation for management
No dysplasia	0.33% per year	Endoscopic surveillance every 3 to 5 years
Low-grade dysplasia	0.7% to 1.0% per year	Confirm diagnosis by expert gastrointestinal pathologist Discuss endoscopic ablation Endoscopic surveillance every 6 to 12 months
High-grade dysplasia	8% per year	Confirm diagnosis by expert gastrointestinal pathologist Refer for endoscopic therapy to center with expertise for - Endoscopic resection of visible lesions - Endoscopic ablation

# Outcomes of Radiofrequency Ablation Compared to Liquid Nitrogen Spray Cryotherapy for the Eradication of Dysplasia in Barrett's Esophagus

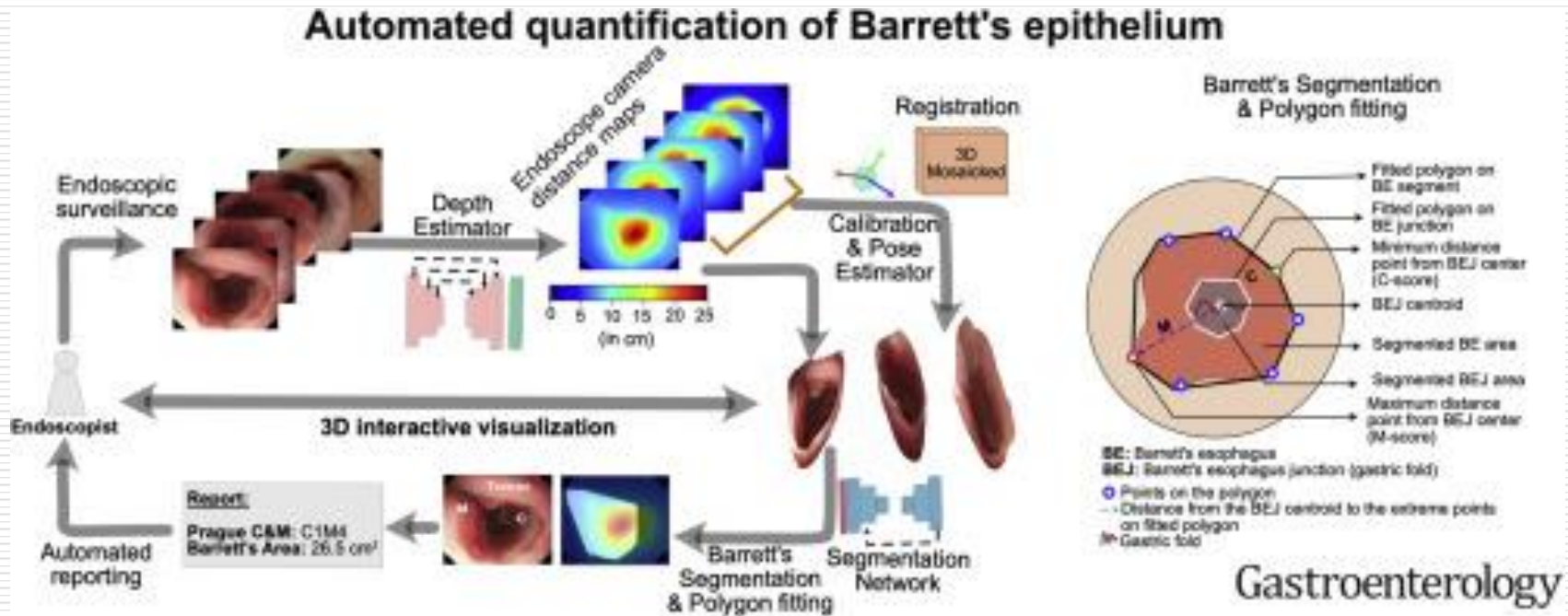
Variable	RFA (n= 100)	LNSC (n= 62)	p-value
Age (SD)	67.7 (11.4)	67.1 (12.3)	0.75
Gender, male (%)	92 (92.0%)	51 (82.3%)	0.07
Long-segment BE (%)	61 (61.0%)	42 (67.7%)	0.38
Low-grade dysplasia	61 (61.0%)	36 (58.1%)	
High-grade dysplasia	32 (32.0%)	19 (30.6%)	



Variable	RFA (n= 100)	LNSC (n= 62)	p-value
CE-D (%)	81 (81.0%)	44 (71.0%)	0.14
CE-IM (%)	64 (64.0%)	41 (66.1%)	0.78
Number of sessions, CE-D (SD)	3.2 (1.6)	4.2 (2.9)	0.05†
Number of sessions, CE-IM (SD)	3.5 (2.2)	4.8 (3.4)	0.04†

CE-D: Complete Eradication - Dysplasie; CE-IM: Complete Eradication - Intestinale Metaplasie

# A Pilot Study on Automatic Three-Dimensional Quantification of Barrett's Esophagus for Risk Stratification and Therapy Monitoring



Endoscopic phantom video data:

**97,2%** accuracy for C&M measurement  
**98,4%** accuracy for area of Barrett's epithelium



# Dysplastic Recurrence After Successful Treatment for Early Barrett's Neoplasia: Development and Validation of a Prediction Model

## Recurrent Barrett's neoplasia



Endoscopic therapy



Complete Barrett eradication



Recurrence  
**0.8%**  
Annual risk

### Patient cohort



Derivation  
N = 1,154



Validation  
N = 321

### Risk factors in prediction model

- New lesion during RFA
- Multiple resections
- Male gender
- Longer Barrett segment
- Baseline HGD or cancer
- Younger age

### External validation

**0.91**  
C-statistic



Prediction tool  
available online

# Dysplastic Recurrence After Successful Treatment for Early Barrett's Neoplasia: Development and Validation of a Prediction Model

(<https://barrett-recurrence.shinyapps.io/Barrett/>)

11:21 LTE

**Patient age**  
20 43 100

**Patient gender**  
 Male  
 Female

**Maximum BE length at baseline**  
0 7 20

**Worst pathology at baseline**  
 Low-grade dysplasia  
 High-grade dysplasia or cancer

**Total ER treatments (n)**  
0 2 10

**Pop-up lesion during ablation**  
 No  
 Yes

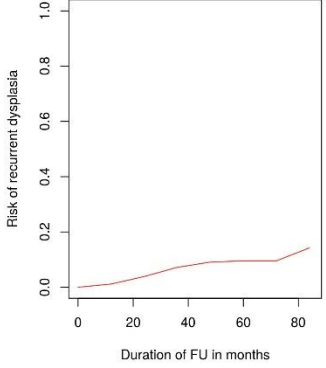
AA [barrett-recurrence.shinyapps.io](https://barrett-recurrence.shinyapps.io)

11:22 LTE

**Cumulative risk for recurrence:**  
Based on the characteristics of this patient, the cumulative predicted probability of developing a dysplastic recurrence (LGD or worse) is:

- \* year 1: 1%;
- \* year 2: 4%;
- \* year 3: 7%;
- \* year 4: 9%;
- \* year 5: 10%;
- \* year 6: 10%;
- \* year 7: 14%;

**Cumulative incidence curve (7 year):**



Duration of FU in months	Risk of recurrent dysplasia
0	0.00
20	0.04
40	0.07
60	0.10
80	0.14

**Disclaimer:**  
barrett-recurrence.shinyapps.io - Privat

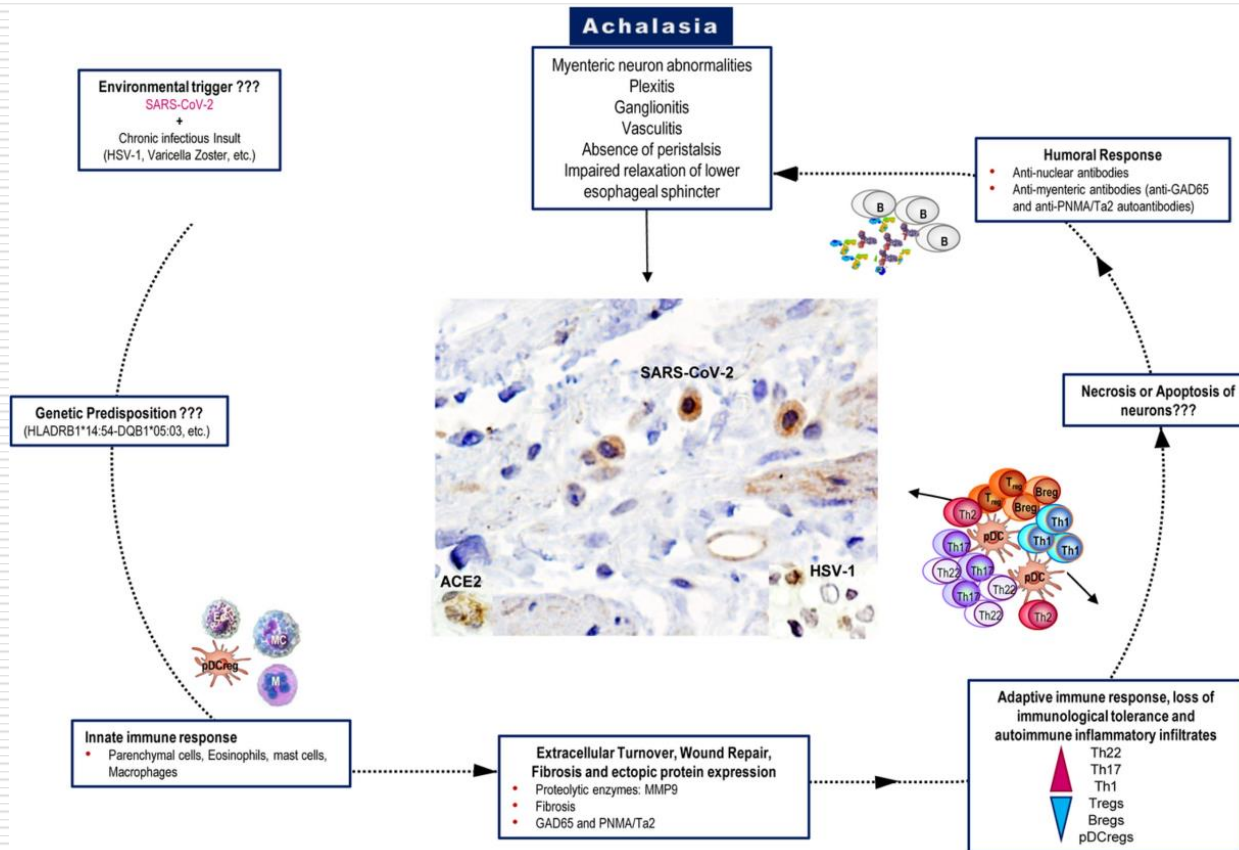
**year 7: 14%**

# Achalasie

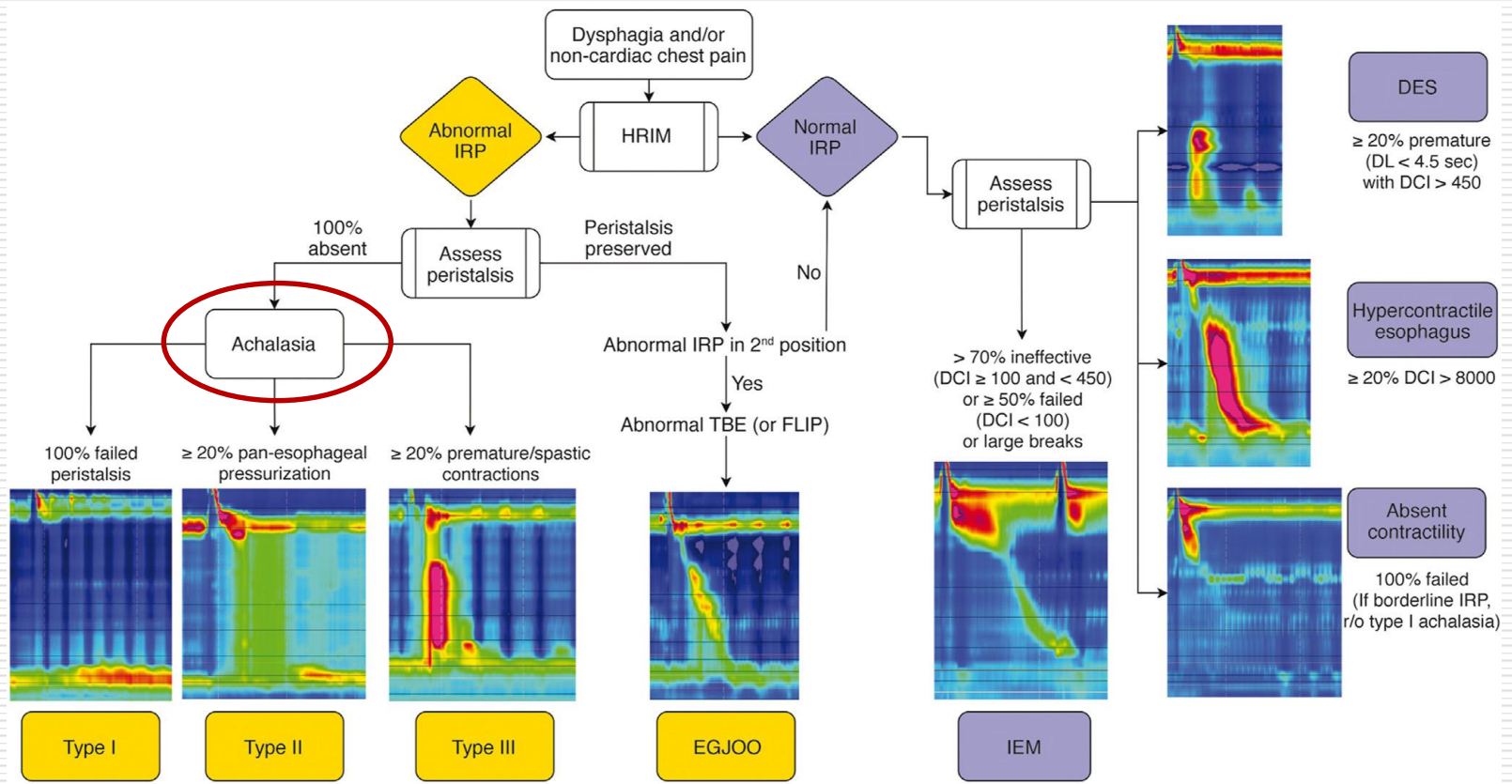
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- ❑ Neurodegenerative Motilitätsstörung (Degeneration Plexus myentericus)
  - ❑ Motilitätsverlust und fehlende Relaxation d. unteren Ösophagussphinkters
  - ❑ Ätiologie: autoimmun; infektiös (HSV, Varizellen?), genetisch
  - ❑ selten, Inzidenz steigend; Gipfel: 30 – 60 Jahre, Kardinalsymptom: Dysphagie
  - ❑ Diagnose: High Resolution Manometrie; Chicago Klassifikation (3 Subtypen)
  - ❑ Komplikationen: Megaösophagus, Aspiration, Karzinom
  - ❑ Therapie:
    - Hellersche Myotomie, Ballondilatation, POEM, Botulinumtoxin,
    - Nitrate, Calciumkanalblocker
-

# Is the Sars-CoV-2 virus a possible trigger agent for the development of achalasia?

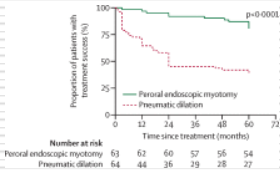


# Diagnostik der Achalasie – Chicago Classification version 4.0



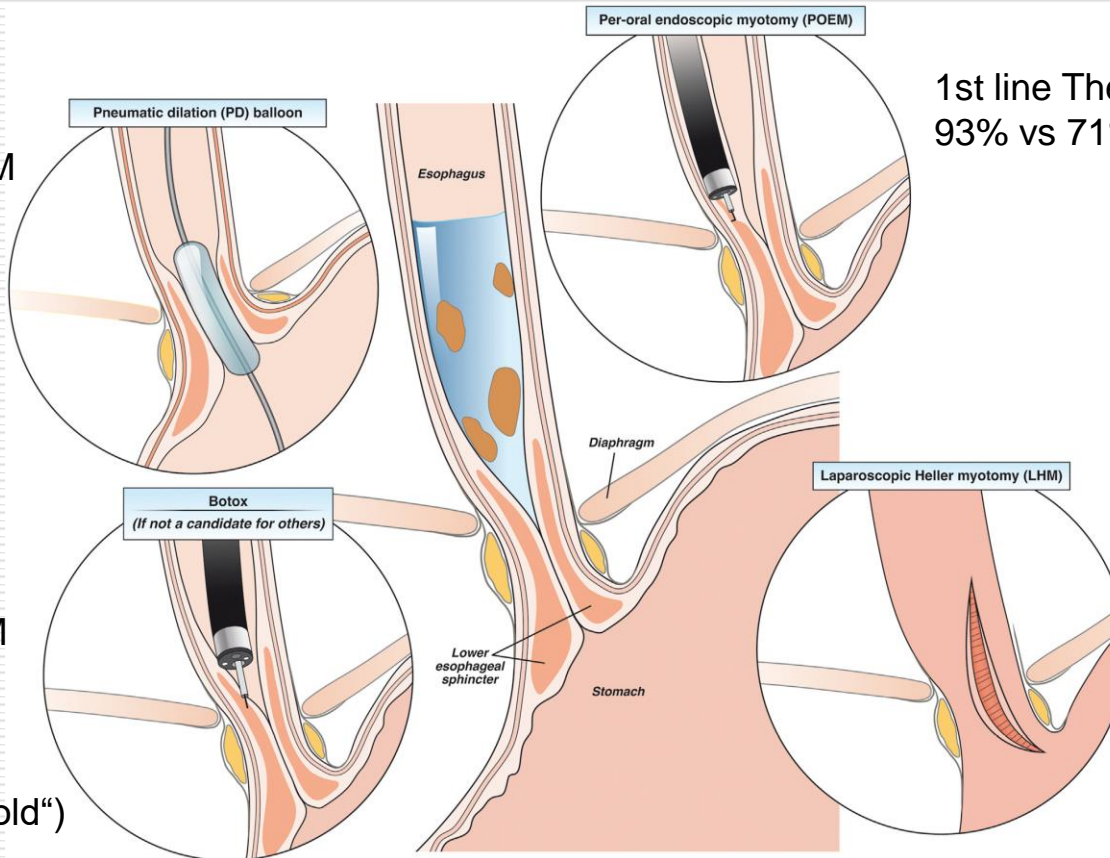
# Therapieoptionen bei Achalasie

Behandlungserfolg nach 5 Jahren:  
 PD 25% vs 81% POEM  
 (Kuipers T, Lancet Gastroenterol Hepatol 2022)



Indikation für Botox:  
 wenn PD, POEM, HLM  
 keine Option!

Pseudo-Achalasie  
 („very old“ od. „oldest-old“)



1st line Therapie bei Typ III  
 93% vs 71% bei LHM (Br J Surg 2019)

Erfolg 2a:  
 83% POEM vs 82% LHM  
 Reflux-Ösophagitis  
 nach LHM 29% vs  
 POEM 44%  
 (Werner YB; NEJM 2019)  
 bei Typ II: Erfolg 93%

# Esophageal Motility Disorders

