

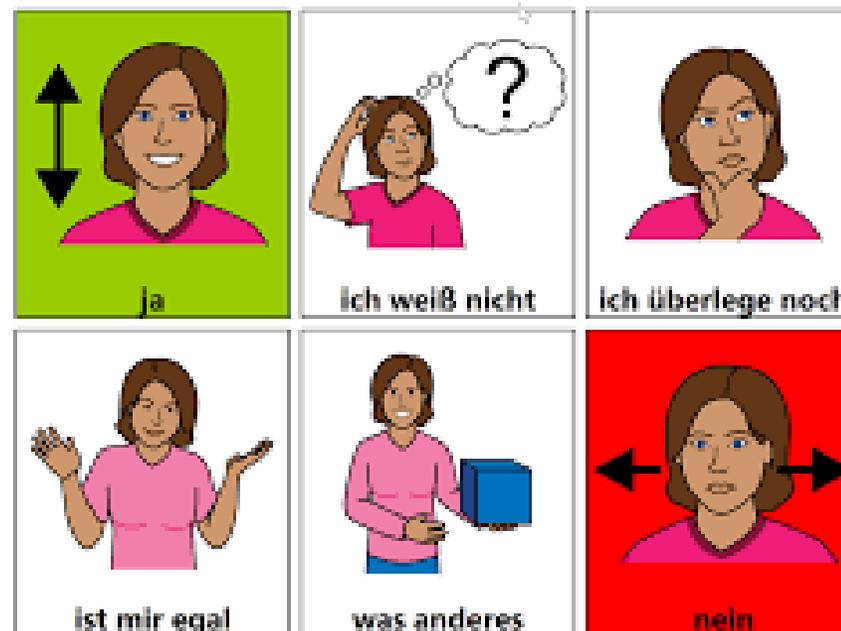
# Kollagenose oder Fibromyalgie?

PD Dr. med. Carmen-Marina (Carina) Mihai

LÄ Rheumatologie

Klinik für Rheumatologie, USZ

**Rheuma Workshop 11.12.2025**



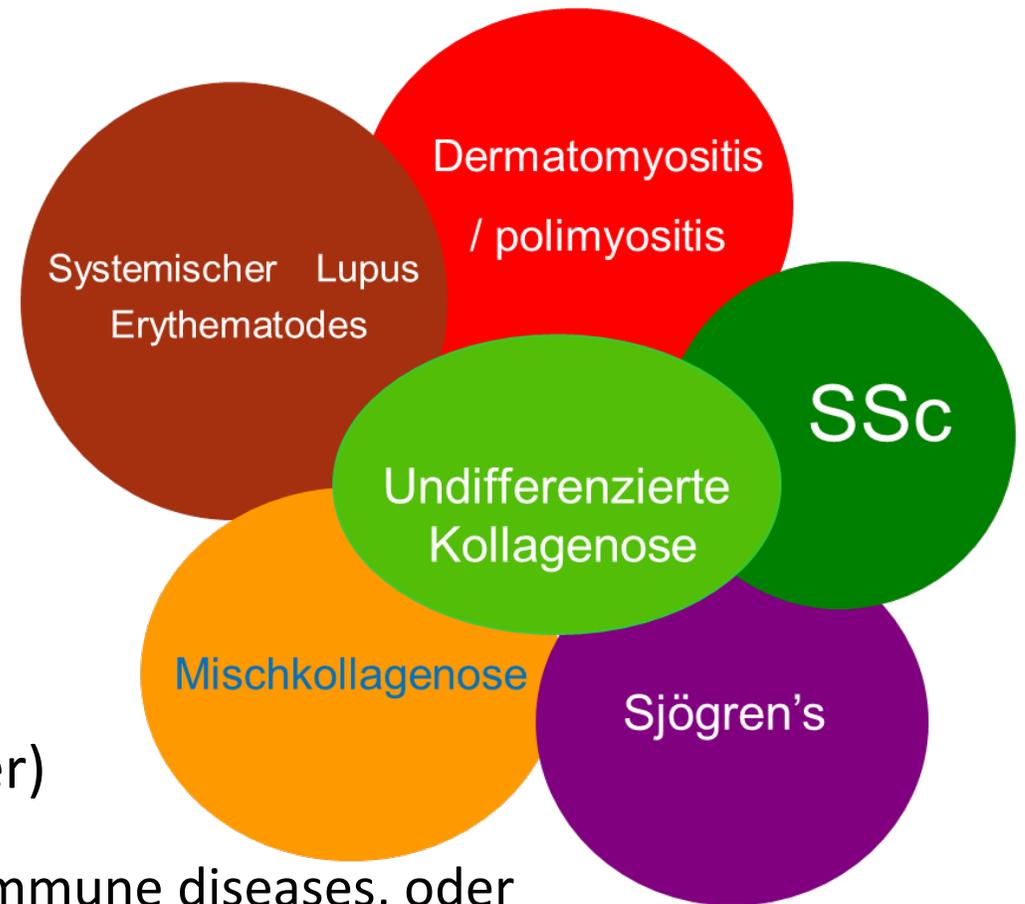
# Disclosures

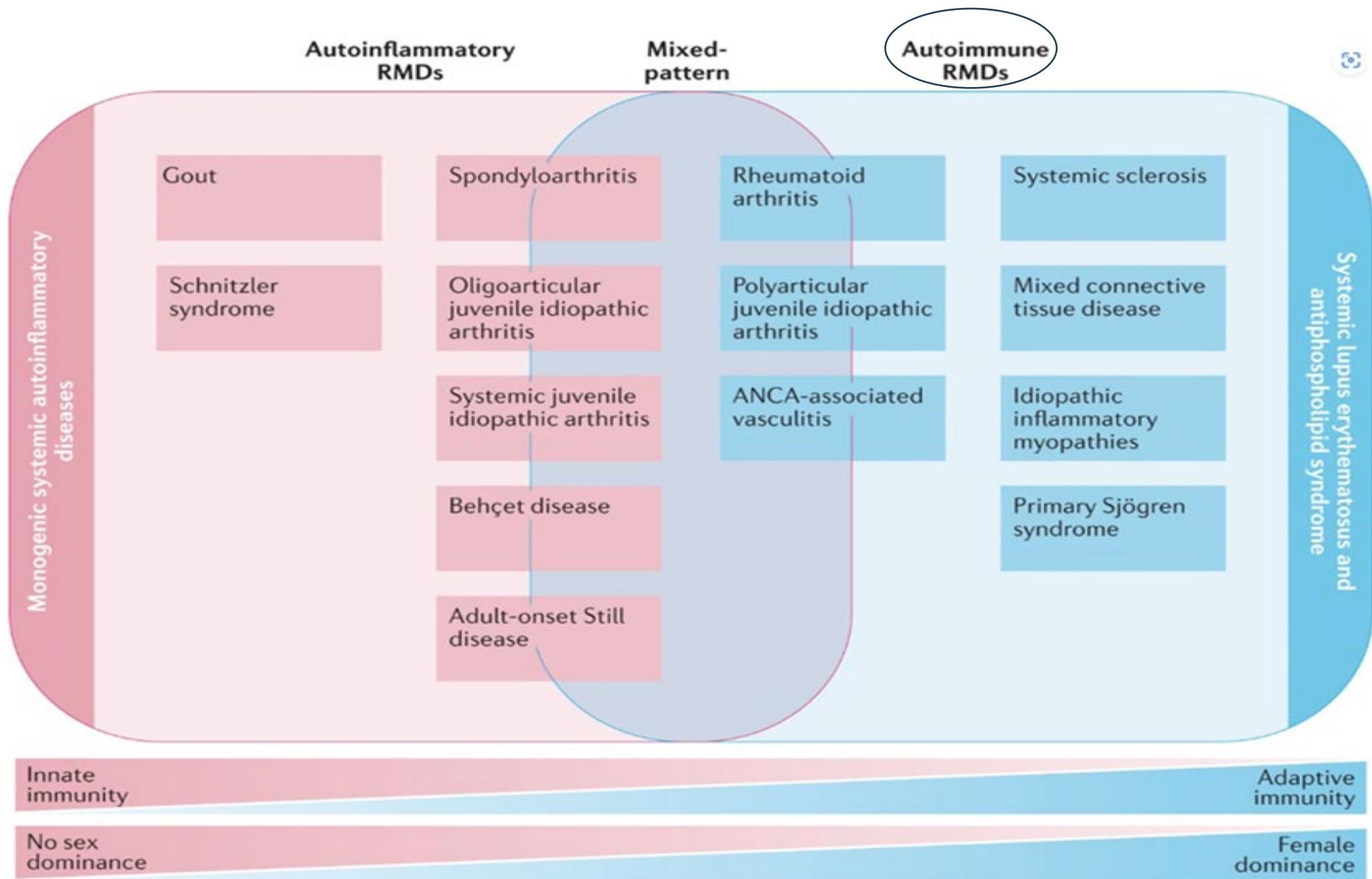
Consultancy relationship and/or research funding and/or speaker fees from:

Boehringer Ingelheim, Janssen Cilag AG, Medbase, MED Talks Switzerland, Mepha, Novartis, PlayToKnow AG

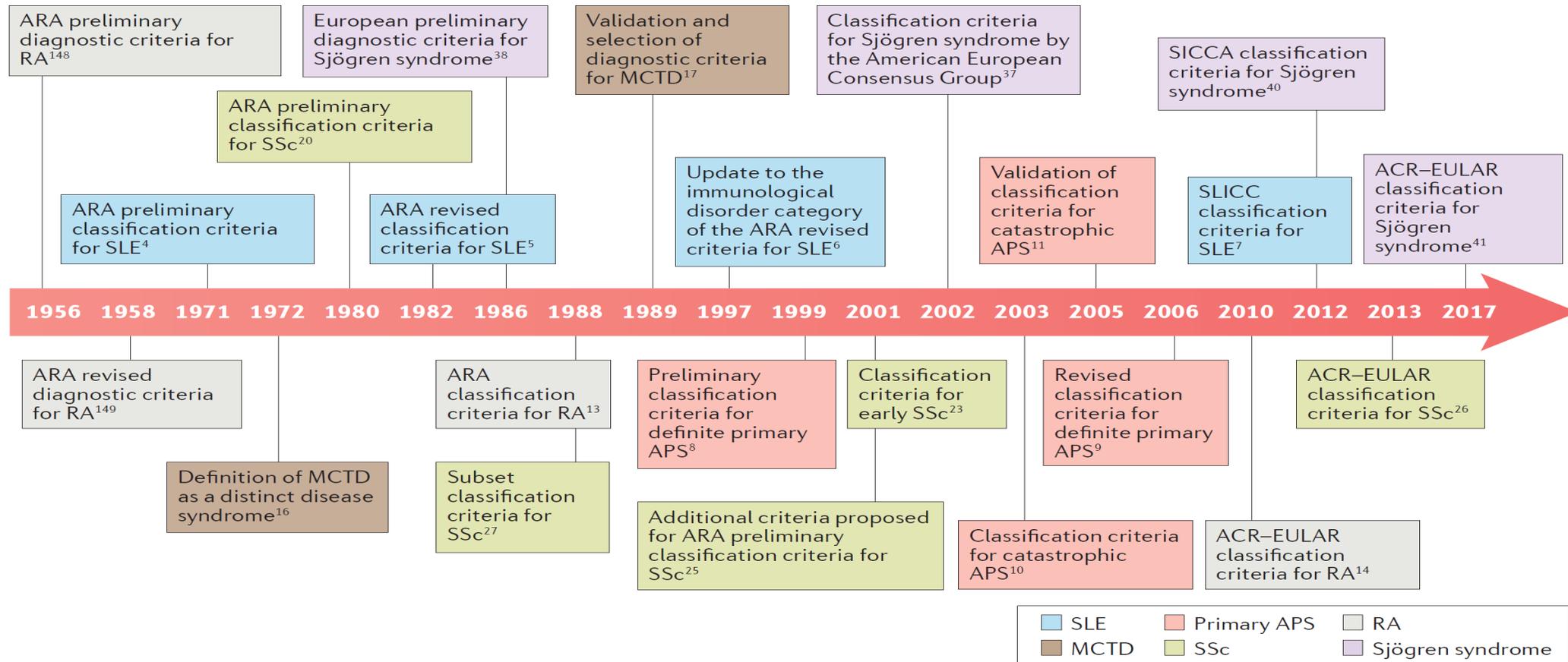
# Kollagenosen – systemische Autoimmunerkrankungen

- Engl. «connective tissue diseases», **CTD**
- Chronische immunmedierte Multisystemerkrankungen
  - Bindegewebe
  - Gefässe
  - Innere Organe
- charakterisiert durch ähnliche
  - klinische &
  - immunologische Befunde (Auto-Antikörper)
- Begriff CTD in Wandlung: neu **rAID**, rheum. autoimmune diseases, oder **SARD**, systemic autoimmune rheumatic diseases
- **Gold Standard: Experts' Opinion**





# Historical evolution of the clinical classification and diagnostic criteria for rheumatic autoimmune diseases (rAIDs)



# Fibromyalgie – What's in a name?



Fibrositis

Fibromyalgie

Nociplastischer  
Schmerz

“These coaggregating pain conditions had historically gone by terms such as somatoform disorders, functional somatic syndromes and chronic multisymptom illness”

*“This notion that all pain had to have a peripheral cause was firmly held in both the field of pain and more broadly in clinical medicine.”*

Clauw DJ. Ann Rheum Dis 2024;83:1421–1427.

# Meilensteine zum Konzept «nociplastischer Schmerz»

## IASP (International Association for the Study of Pain)

### 2017 – definition of nociplastic pain

“pain that arises from altered nociception” not fully explained by nociceptive or neuropathic pain mechanisms:

1. pain duration >3 months
2. regional, multifocal or widespread distribution
3. cannot entirely be explained by nociceptive or neuropathic mechanisms
4. clinical signs of pain hypersensitivity present in the region of pain

# Meilensteine zum Konzept «nociplastischer Schmerz»

*“Not surprisingly, rheumatologists played a seminal role in moving fibrositis to fibromyalgia”*

Wolfe F, Smythe HA, Yunus MB. The ACR1990 criteria for the classification of fibromyalgia. Report of the multicenter criteria committee. Arthritis Rheum 1990;33:160–72.

- importance of using a body map to assess widespreadness of pain
- FM = continuum (**degree of fibromyalgianess**) rather than discrete disorder
- comorbid FM (“secondary FM”) very common in any autoimmune disorder
- polysensory sensitivity in FM
- importance of sleep problems in both causing and treating FM

Clauw DJ. Ann Rheum Dis 2024;83:1421–1427.

# 2016 American College of Rheumatology revised criteria

A patient fulfills the modified 2016 **fibromyalgia** criteria if they meet all the conditions mentioned below:

- WPI score of  $\geq 7$  with an SS score  $\geq 5$
- or a WPI score of 4 - 6 with an SS score  $\geq 9$
- Generalized pain = pain in  $\geq 4$  of 5 regions, excluding the jaw, chest, and abdomen
- Symptoms should be present at a similar level for  $\geq 3$  months

Häuser, W., Brähler, E., Ablin, J. and Wolfe, F. (2021),. Arthritis Care Res, 73: 617-625.

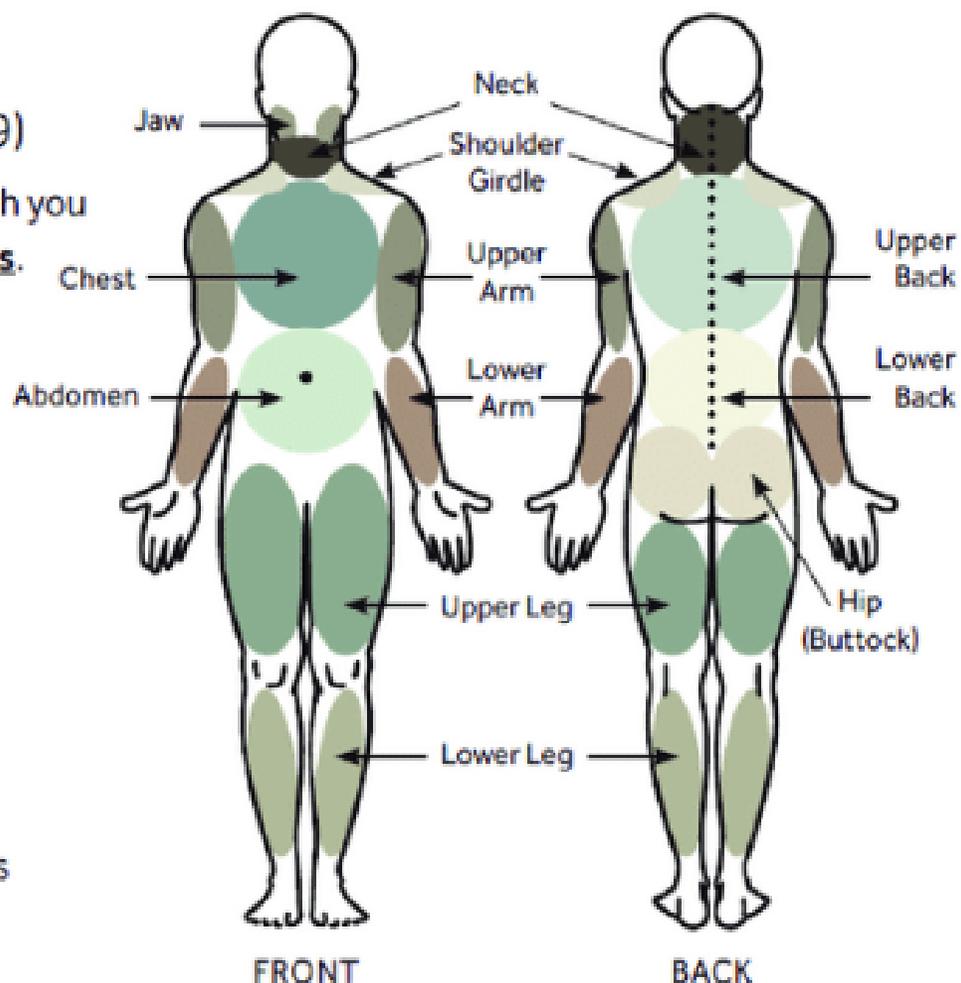
## Widespread Pain Index (WPI)

(1 point per check box; score range: 1–19)

Please check the boxes below for each area in which you have had pain or tenderness **during the past 7 days**.

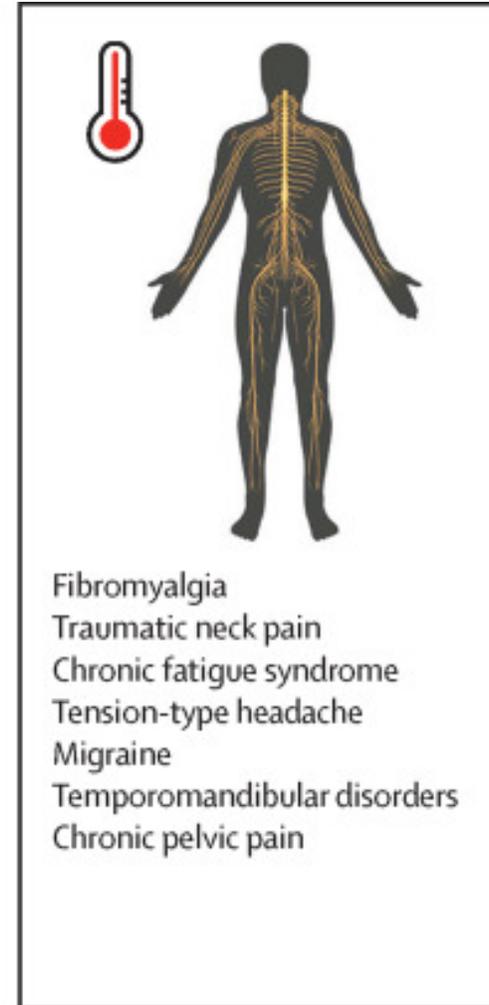
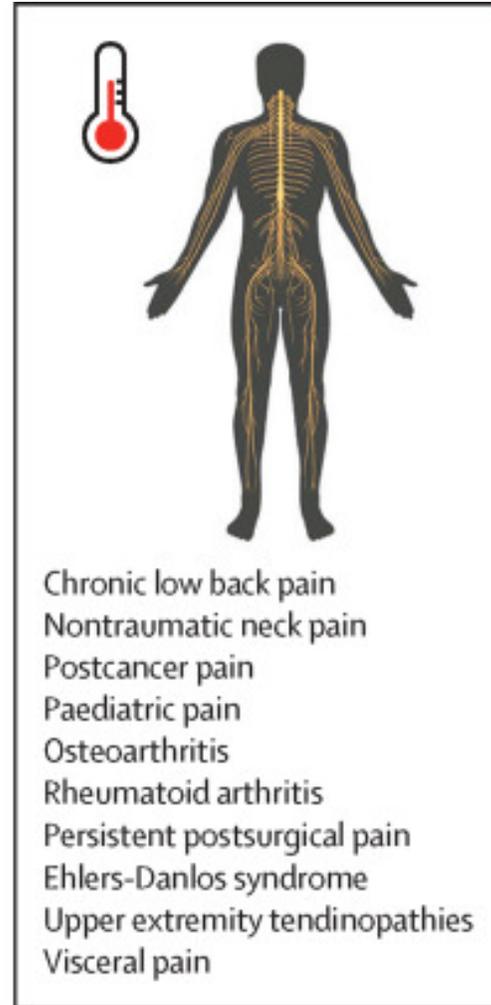
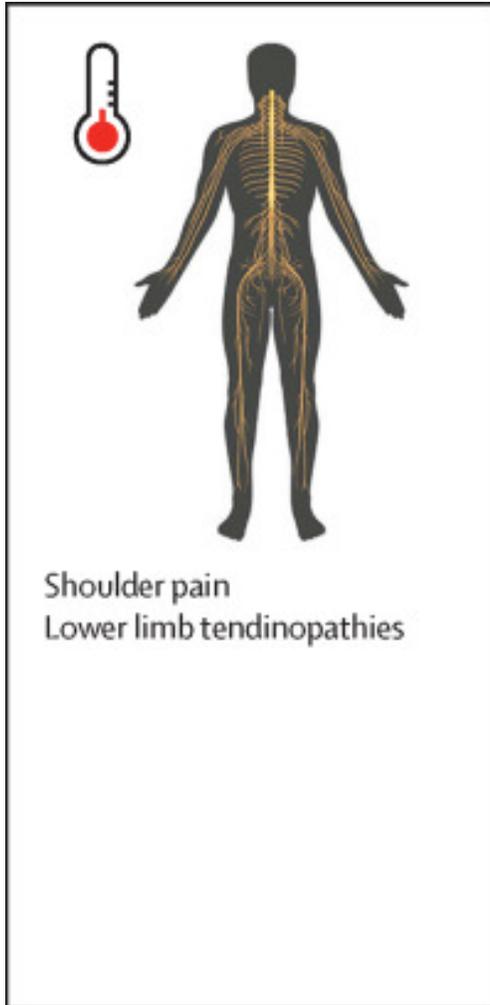
- |   |  |
|---|--|
| <input type="checkbox"/> Shoulder girdle, left  | <input type="checkbox"/> Lower leg left      |
| <input type="checkbox"/> Shoulder girdle, right | <input type="checkbox"/> Lower leg right     |
| <input type="checkbox"/> Upper arm, left        | <input type="checkbox"/> Jaw left            |
| <input type="checkbox"/> Upper arm, right       | <input type="checkbox"/> Jaw right           |
| <input type="checkbox"/> Lower arm, left        | <input type="checkbox"/> Chest               |
| <input type="checkbox"/> Lower arm, right       | <input type="checkbox"/> Abdomen             |
| <input type="checkbox"/> Hip (buttock) left     | <input type="checkbox"/> Neck                |
| <input type="checkbox"/> Hip (buttock) right    | <input type="checkbox"/> Upper back          |
| <input type="checkbox"/> Upper leg left         | <input type="checkbox"/> Lower back          |
| <input type="checkbox"/> Upper leg right        | <input type="checkbox"/> None of these areas |

WPI score: \_\_\_\_\_



Diagnostic and Severity Criteria for Fibromyalgia: Widespread Pain Index (WPI). (Adapted from: Wolfe F. et al. Arthritis Care Res (Hoboken) 2010; 62: 600-610).

# Anteil noziplastischer Schmerzen bei:



Central  
sensitization  
“Degree of  
fibromyalginess”

Wolfe F. *Fibromyalginess*.

Arthritis Rheum 2009;61:715–6.

# Central Sensitization Inventory (CSI) A.

1 I feel tired and unrefreshed when I wake from sleeping.

2 My muscles feel stiff and achy.

3 I have anxiety attacks.

4 I grind or clench my teeth.

5 I have problems with diarrhea and/or constipation.

6 I need help in performing my daily activities.

7 I am sensitive to bright lights.

8 I get tired very easily when I am physically active.

9 I feel pain all over my body.

10 I have headaches.

11 I feel discomfort in my bladder and/or burning when I urinate.

12 I do not sleep well.

13 I have difficulty concentrating.

14 I have skin problems such as dryness, itchiness, or rashes.

15 Stress makes my physical symptoms get worse.

16 I feel sad or depressed.

17 I have low energy.

18 I have muscle tension in my neck and shoulders.

19 I have pain in my jaw.

20 Certain smells, such as perfumes, make me feel dizzy and nauseated.

21 I have to urinate frequently.

22 My legs feel uncomfortable and restless when I am trying to go to sleep at night.

23 I have difficulty remembering things.

24 I suffered trauma as a child.

25 I have pain in my pelvic area.

TG Mayer, R Neblett, H Cohen, *et al.* Pain Pract, 12 (2012), pp. 276-285

# Central Sensitization Inventory (CSI) B.

	DIAGNOSIS	NO	YES	YEAR DIAGNOSED
1	Restless Leg Syndrome			
2	Chronic Fatigue Syndrome			
3	Fibromyalgia			
4	Temporomandibular Joint Disorder (TMJ)			
5	Migraine or Tension Headaches			
6	Irritable Bowel Syndrome			
7	Multiple Chemical Sensitivities			
8	Neck Injury (including Whiplash)			
9	Anxiety or Panic Attacks			
10	Depression			

Part A. Scale 0-4

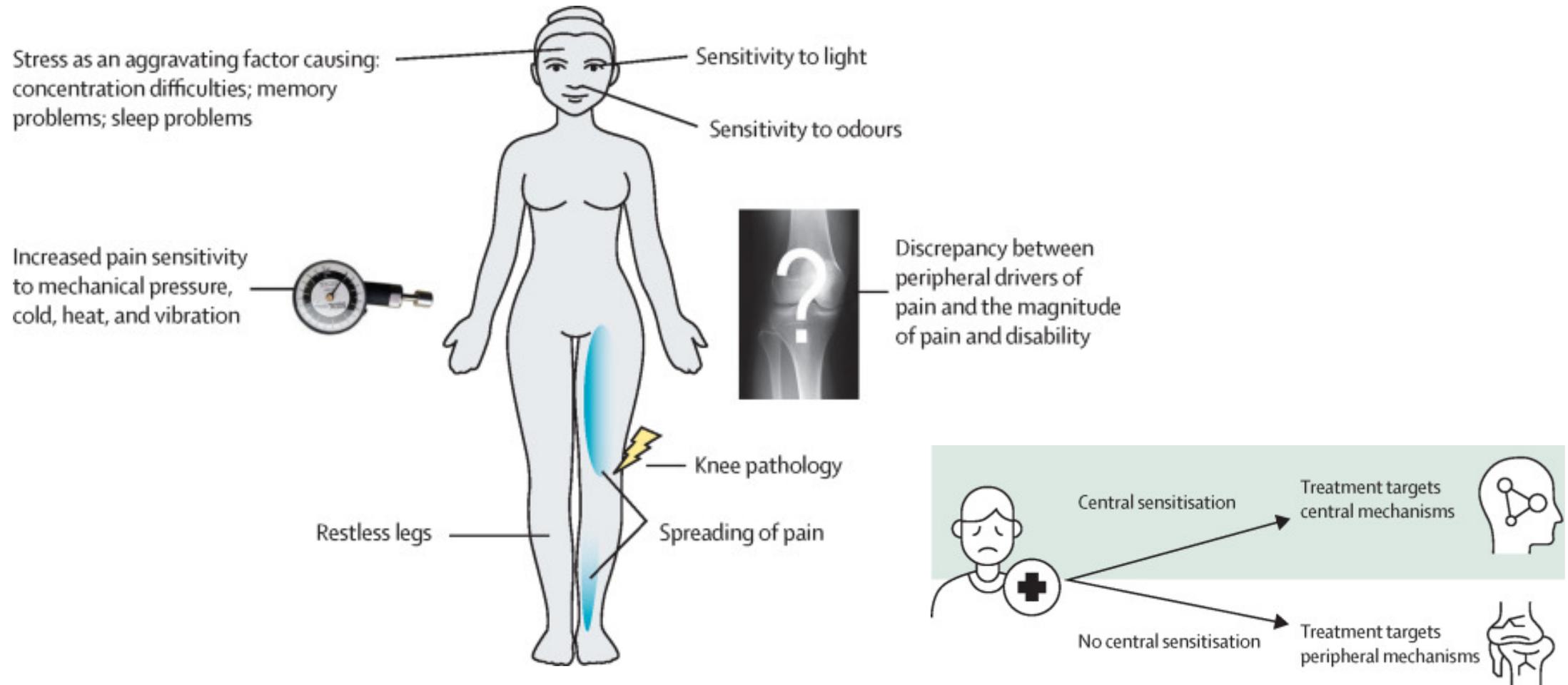
«Never Rarely Sometimes Often Always»

Range total score A: 0-100

Part B. At least 1 of 10 dg.

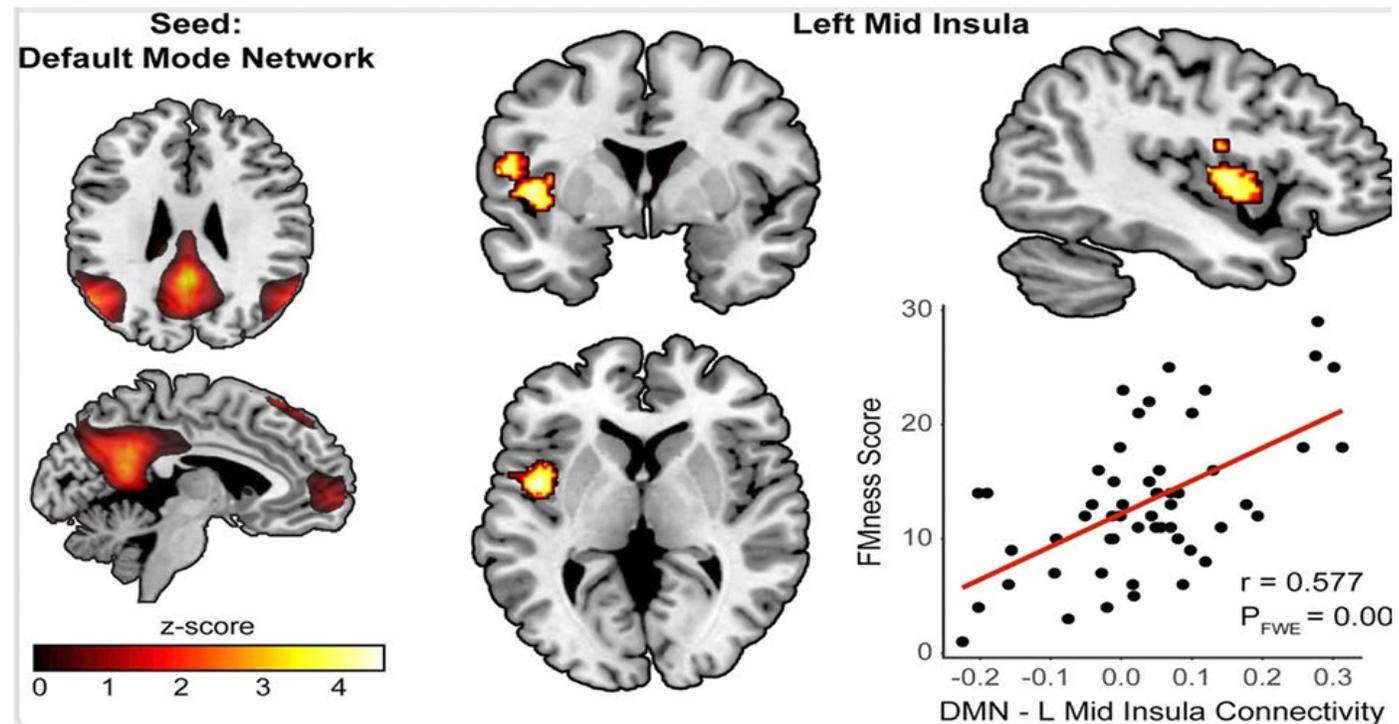
TG Mayer, R Neblett, H Cohen, *et al.* Pain Pract, 12 (2012), pp. 276-285

# Paradigm of chronic sensitization



# Chronic sensitization: research techniques

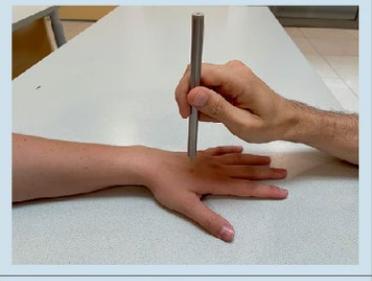
functional MRI (fMRI)



**Figure 1** The degree of fibromyalgia predicts imaging findings of nociplastic pain in RA (from *Nature Review Neurology*). DMN, default mode network; FM, fibromyalgia; RA, rheumatoid arthritis.

# Chronic sensitization: research techniques

## Quantitative Sensory Testing (QST)

<p><b>1. Eigenschaften des Temperaturempfindens</b></p> <ul style="list-style-type: none"><li>• Hilfsmittel: Thermode</li><li>• Wahrnehmungsschwelle für Kälte und Wärme bzw. Warm- und Kalt-Detektionsschwelle</li><li>• Fähigkeit, wechselnde warme und kalte Reize voneinander zu unterscheiden (thermische Unterschiedsschwelle)</li><li>• Empfindung kalter Reize als heiß (paradoxe Hitzeempfindung)</li><li>• Schwellen für Kälte- und Hitzeschmerz</li></ul>		<p><b>3. Mechanische Schmerzschwelle</b></p> <ul style="list-style-type: none"><li>• Hilfsmittel: Pinprick</li></ul>		
<p><b>2. Schwelle für Berührungswahrnehmung</b></p> <ul style="list-style-type: none"><li>• Hilfsmittel: von-Frey-Nylonfilamente</li></ul>		<p><b>4. Mechanische Schmerzsensitivität bzw. Pinprick-Hyperalgesie</b></p> <ul style="list-style-type: none"><li>• In diesem Test wird geprüft, wie gut spitze, stechende Reize wahrgenommen werden können und wie schmerzhaft diese empfunden werden.</li><li>• Des Weiteren wird hier auch die dynamische mechanische Allodynie mittels Wattebausch, Q-Tip oder Pinsel beurteilt.</li></ul>		
<p><b>5. Überprüfung des Wind-up-Phänomens</b></p> <ul style="list-style-type: none"><li>• Hierbei wird wiederum ein Reiz mittels Pinprick appliziert, welcher auf einer Schmerzskala von 0 bis 100 beurteilt wird. Um die zeitliche Summation zu erreichen, werden im Anschluss zehnmals hintereinander die Pinprick - Reize gesetzt und wieder evaluiert.</li></ul>	<p><b>6. Wahrnehmungsschwelle für Vibration mittels Stimmgabel</b></p>		<p><b>7. Druckschmerzschwelle mithilfe eines Druckalgometers</b></p>	

Adler, M., Taxer, B. *Schmerz* **36**, 437–446 (2022).

# Fazit für die Praxis

- **Schmerzen:** Nociceptiv DD nociplastisch DD beides “explain the pain!”

➤ Nociplastisch = keine Diagnose, nur ein Pathomechanismus

*“It is better to think of nociplastic pain as an addition element to be treated—rather than the sole pain mechanism.”*

- **Widespread Pain** – use a body map!
- **Weitere Symptome:** Fatigue, Schlaf, Gedächtnisstörung
- **Nociceptiver Schmerz = Auslöser nociplastischer Schmerzen “Bottom-up”:** Einstellung Entzündung => Abnahme der zentralen Sensitivierung
- **Opiate und Glucocorticoide vermeiden, GC wirken unspezifisch!**
- **Multimodale Therapie** *“The core treatments of nociplastic pain are nonpharmacological”*

# Referenzen

- Clauw DJ. *From fibrositis to fibromyalgia to nociplastic pain: how rheumatology helped get us here and where do we go from here?* Ann Rheum Dis 2024;83:1421–1427.
- Nijs J, George SZ, Clauw DJ, et al. *Central sensitisation in chronic pain conditions: latest discoveries and their potential for precision medicine.* Lancet Rheumatol. 2021 May;3(5):e383-e392.

**Danke für die Aufmerksamkeit!**

