

# NetwOArk

The European Network on OsteoArthritis

# OSTEOARTHRITIS DISEASE AND ILLNESS

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Funded by  
the European Union



[www.netwoark.eu](http://www.netwoark.eu)

## Paid Consultancy

- ReumaNederland, Amsterdam, NL
- CureNova, Wiesbaden, Germany
- Regenosine Inc, New Jersey, USA
- Charité - Universitätsmedizin Berlin, Klinik für Rheumatologie und Klinische Immunologie & BIH Center für Regenerative Therapien, Berlin, Germany

## Grant Support

- IMI APPROACH
- COST netwOArk
- UMC Utrecht, Utrecht, NL

# netwOArk in a nutshell

The main aim of EU-netwOArk is to set up the European Society for Osteoarthritis (EUSOA), with three major stakeholder groups:

Patients, Clinicians and Researchers (both from academia and industry)



# Why consider Disease AND Illness?



Source: Adobe Stock

# Disease vs Illness



Source: ReumaNederland

**Already in 1978, Cassell described illness as: ‘what the patient feels when he goes to the doctor’, and disease as: ‘what he has on the way home from the doctor’s office’**

**In short, disease is something an organ has, as defined by modern medicine, and illness is something a person has. Although illness and disease usually coexist, disease may occur in the absence of illness and vice versa.**

Cassell, E. J. (1978). *The Healer's Art: A New Approach to the Doctor-Patient Relationship*. Harmondsworth: Penguin Books.

Karsdal et al. OA&C 2022

# THE OSTEOARTHRITIS 'ICEBERG'

ILLNESS INDICATORS

DISEASE INDICATORS

SYMPTOM<sup>+</sup>

DIAGNOSED

X-RAY<sup>+</sup>

MRI<sup>+</sup>

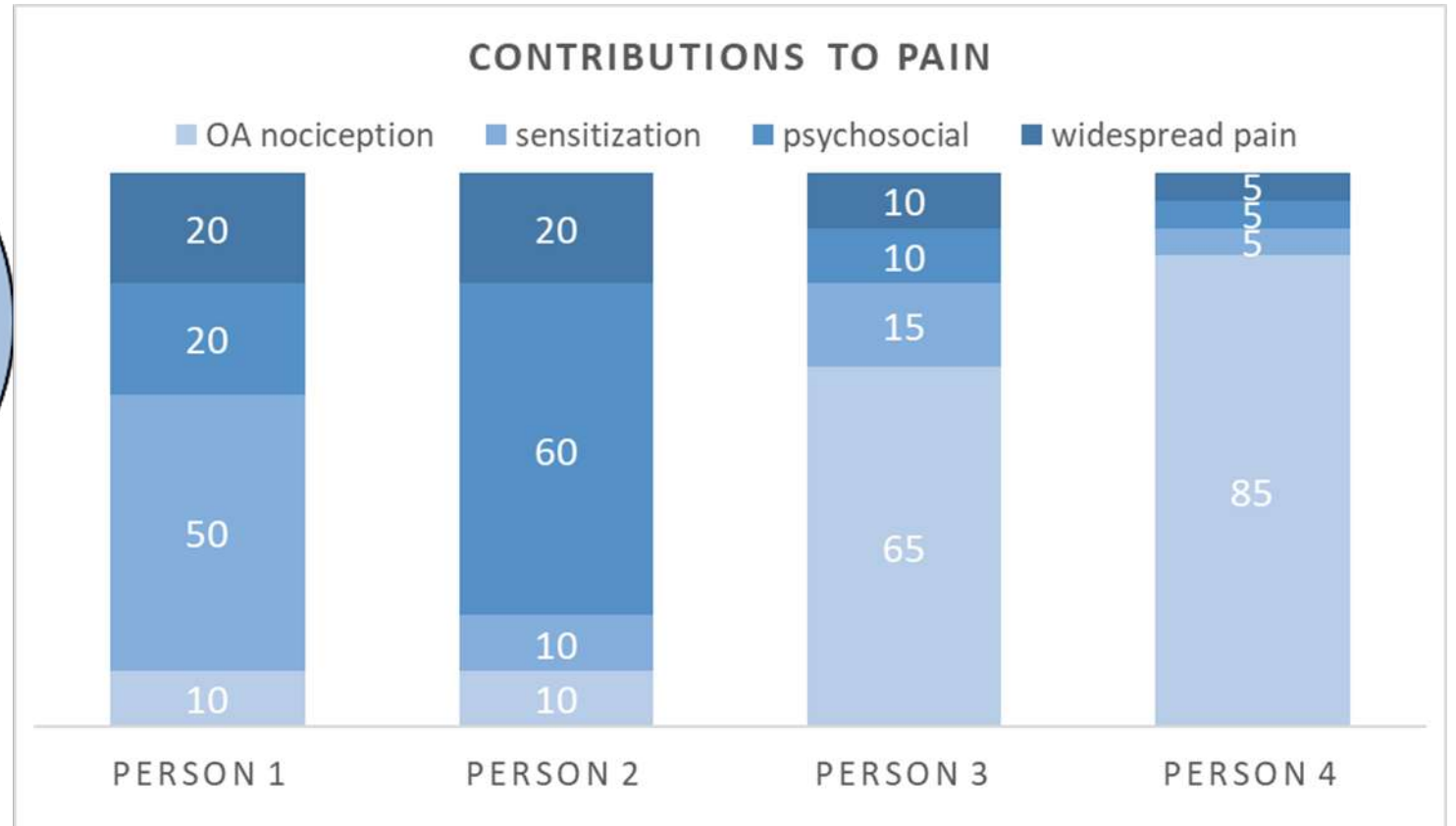
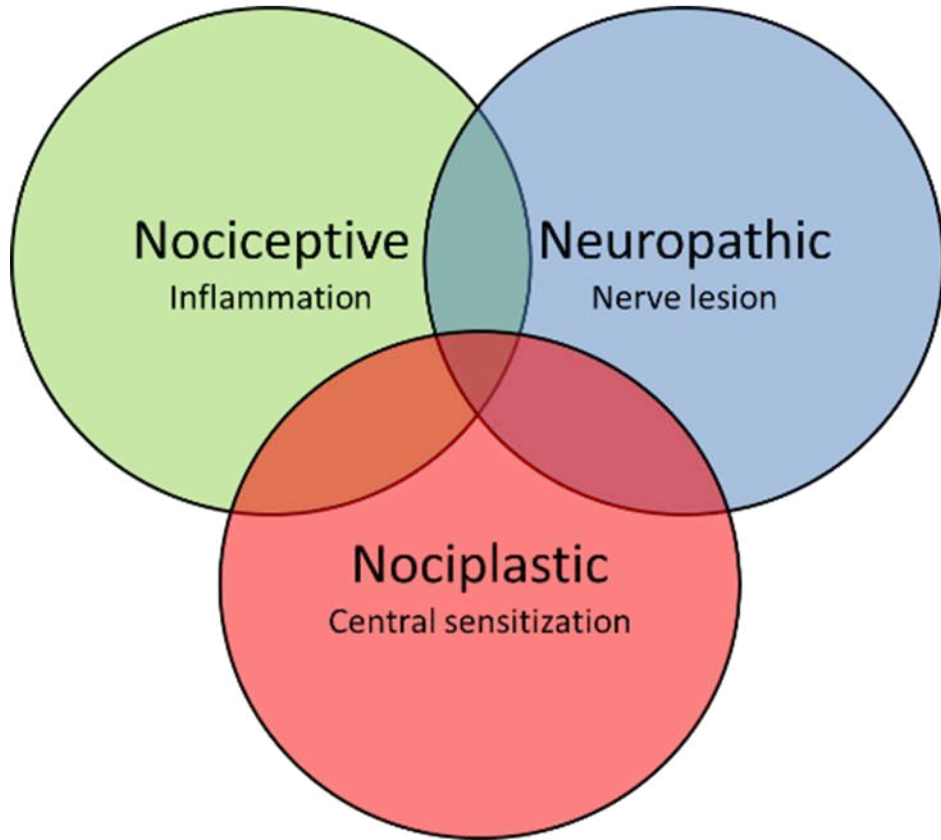
BIOMARKER<sup>+</sup>

DIAGNOSED

UNDIAGNOSED

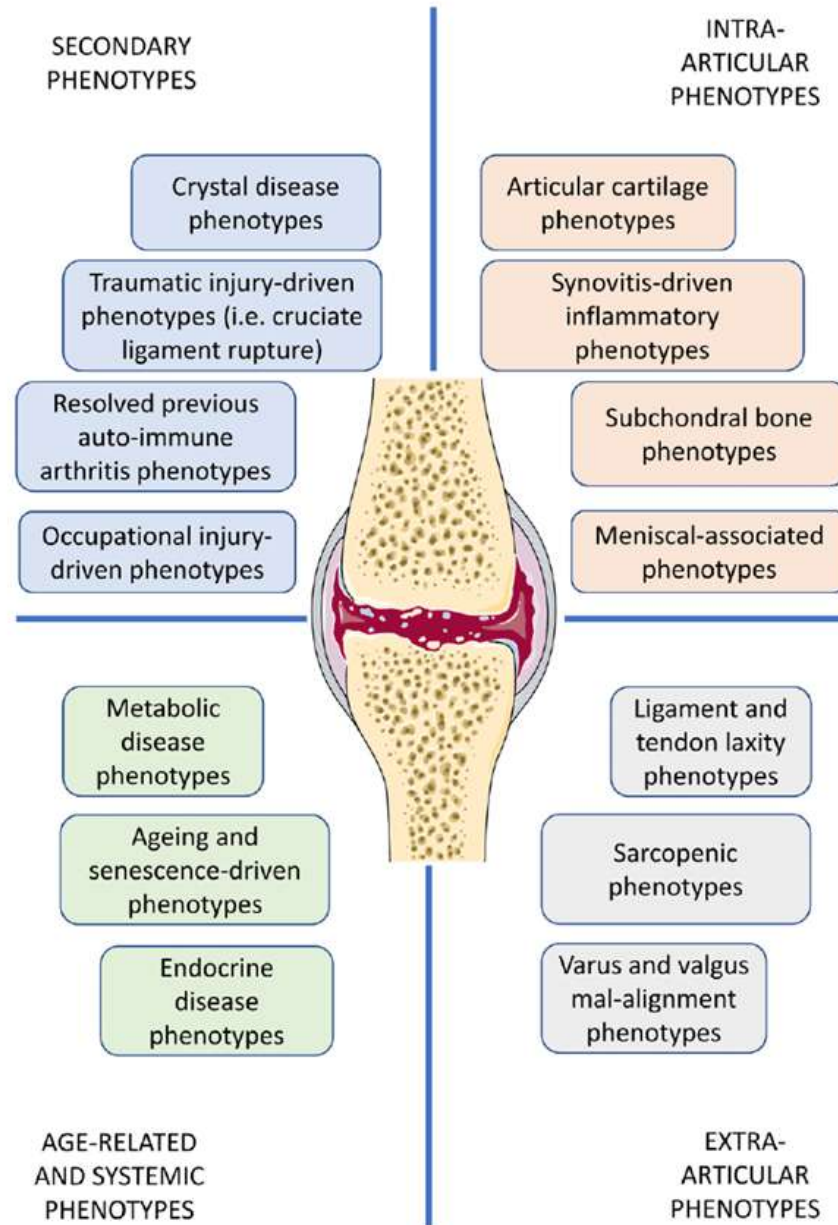
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# SYMPTOM/PAIN



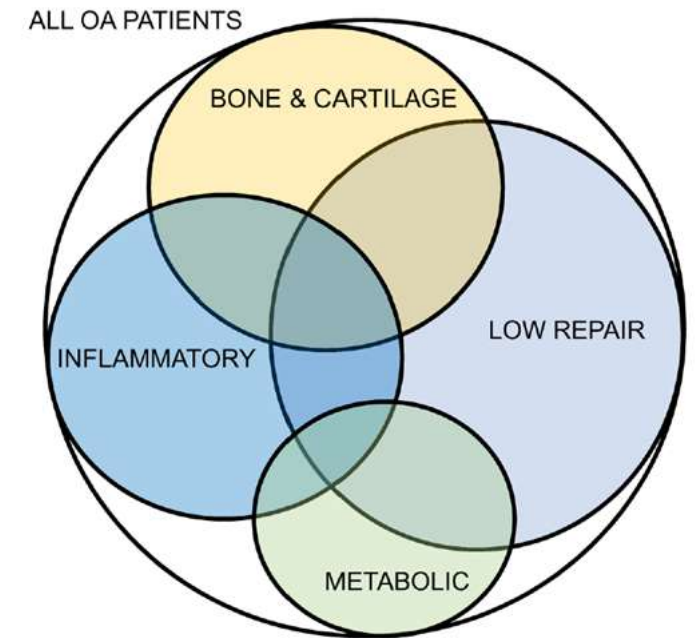
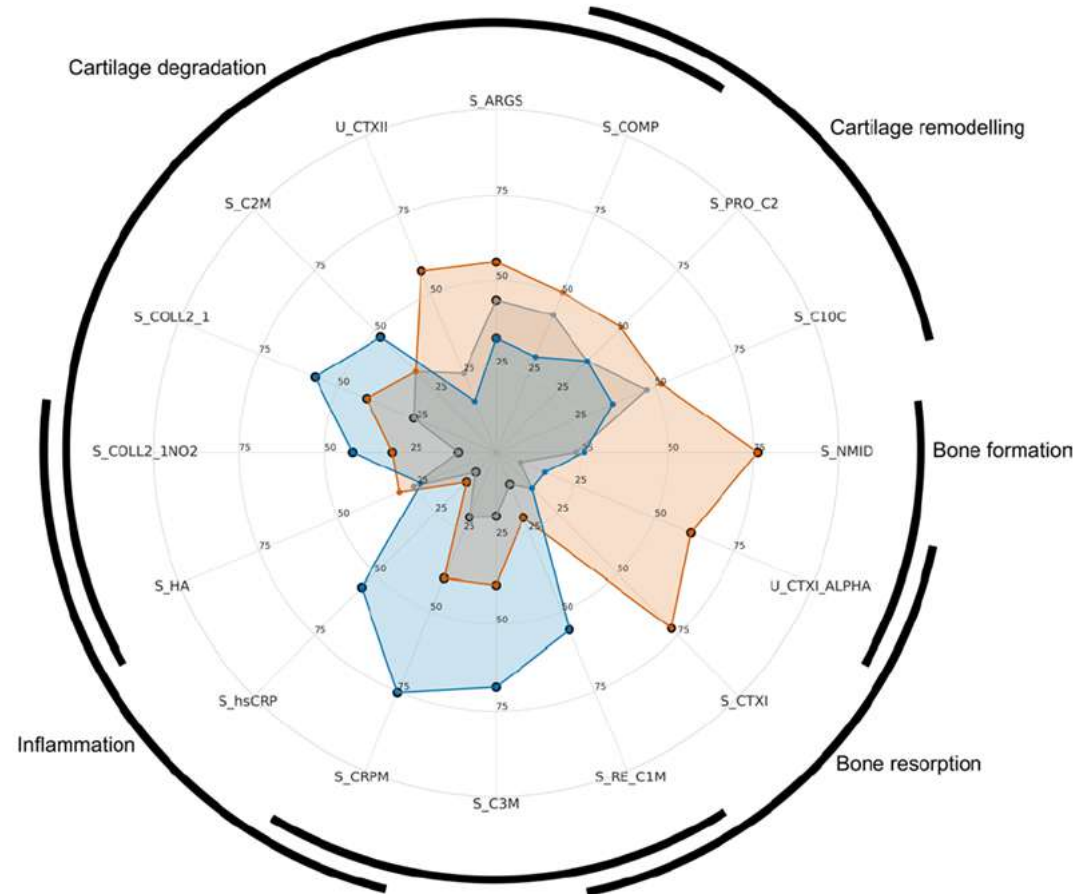
Source: Karsdal et al. OA&C 2022

# Patient Phenotypes



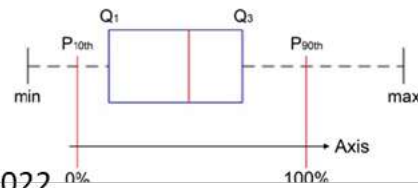


# Patient Endotypes



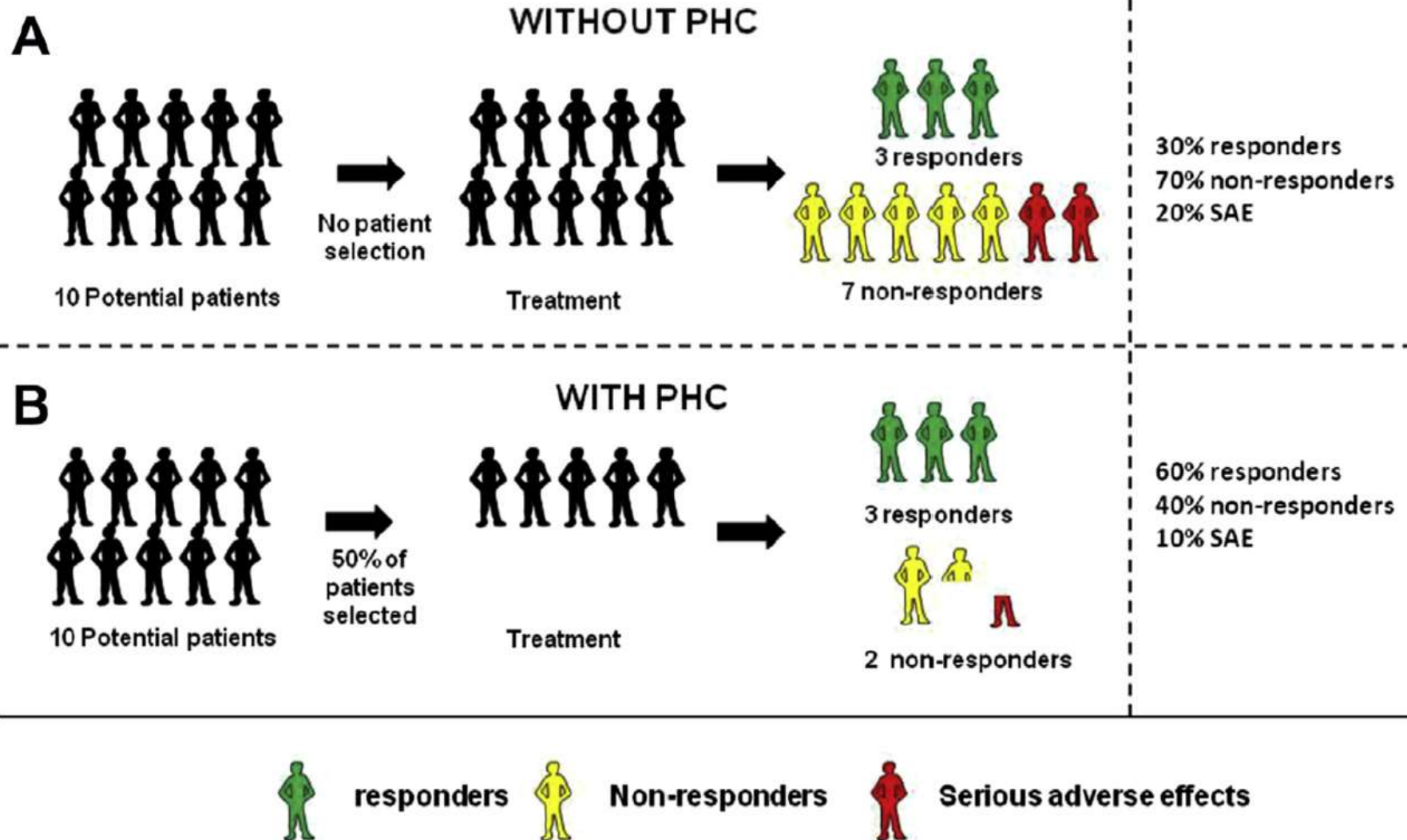
Data from IMI APPROACH cohort

Joint tissue degradation



- Cluster1 (Low tissue turnover)
- Cluster2 (Structural damage)
- Cluster3 (Systemic inflammation)
- Statistical significance w.r.t. the other class values

# Personalized Care



# So, why is it important to understand the disease and the illness?

## Improve patient care and outcomes:

- Treat and monitor based on objective biologically based parameter(s) thus avoid misclassification error
- Avoid false security when underlying disease persists but patient may feel much better after a given treatment
- Prevent irreversible disability, depression, lost jobs / financial stress with early identification of pathological process
- Confer social legitimacy on a patient's symptoms

## Contribute to patient safety

Reduce the risk of trial-and-error treatment

Reduce over-prescription

# Disease and Illness



**The way to get started is to quit talking and begin doing.**

**Walt Disney**

## Working Groups



Patient engagement & information programme on OA



Speed up translation from bench to bedside



OA Phenotypes, patient stratification and comorbidities



Building the European Society for Osteoarthritis (EUSOA)

# THANK YOU

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 [www.netwoark.eu](http://www.netwoark.eu)  
[www.eusoa.eu](http://www.eusoa.eu)

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The European Network on OsteoArthritis

  
EUROPEAN COOPERATION  
IN SCIENCE & TECHNOLOGY



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