

ENDOTARGET

Systemic Endotoxemia as the driver of chronic inflammation – Biomarkers and novel therapeutic targets for Arthritis

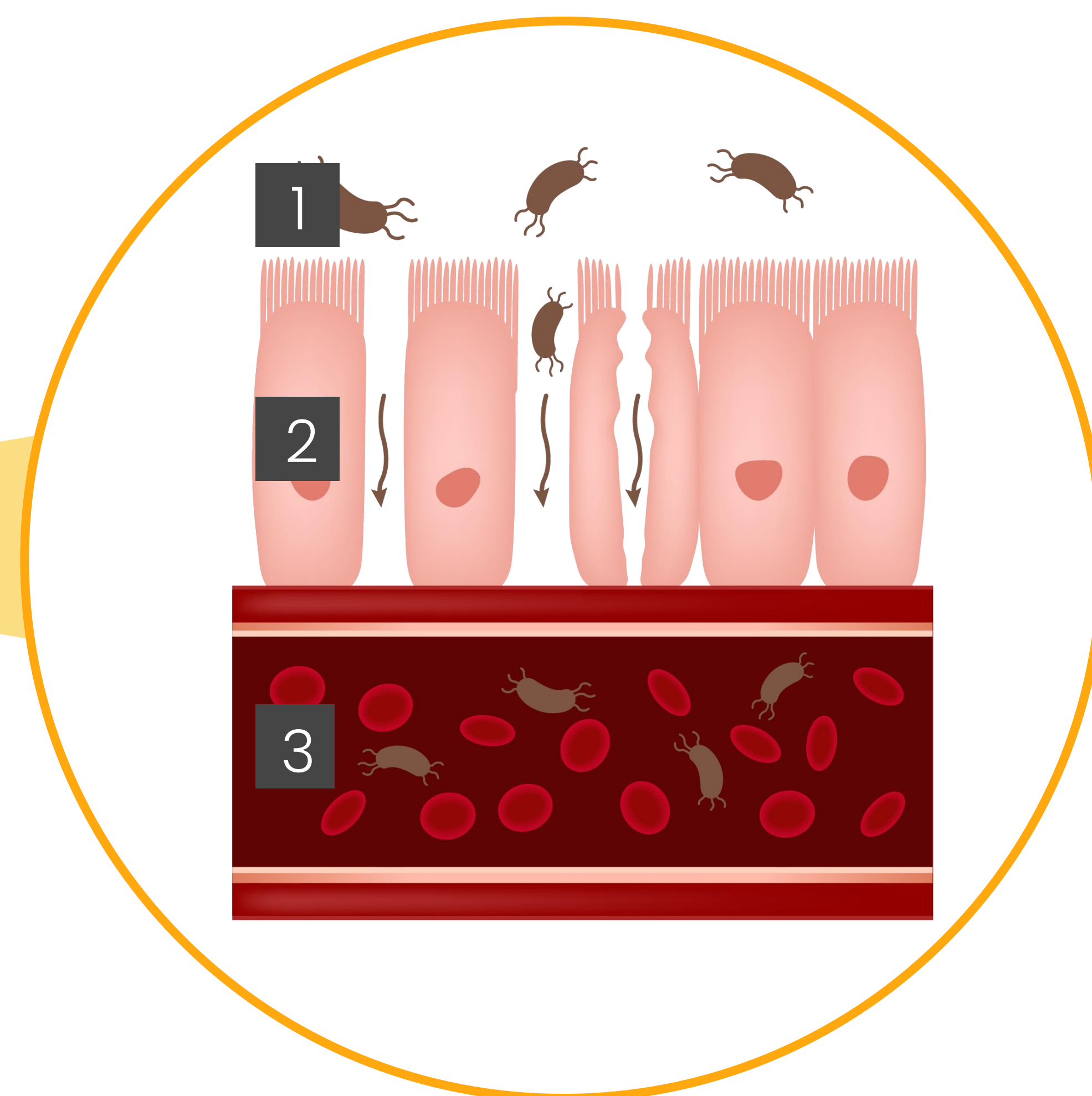
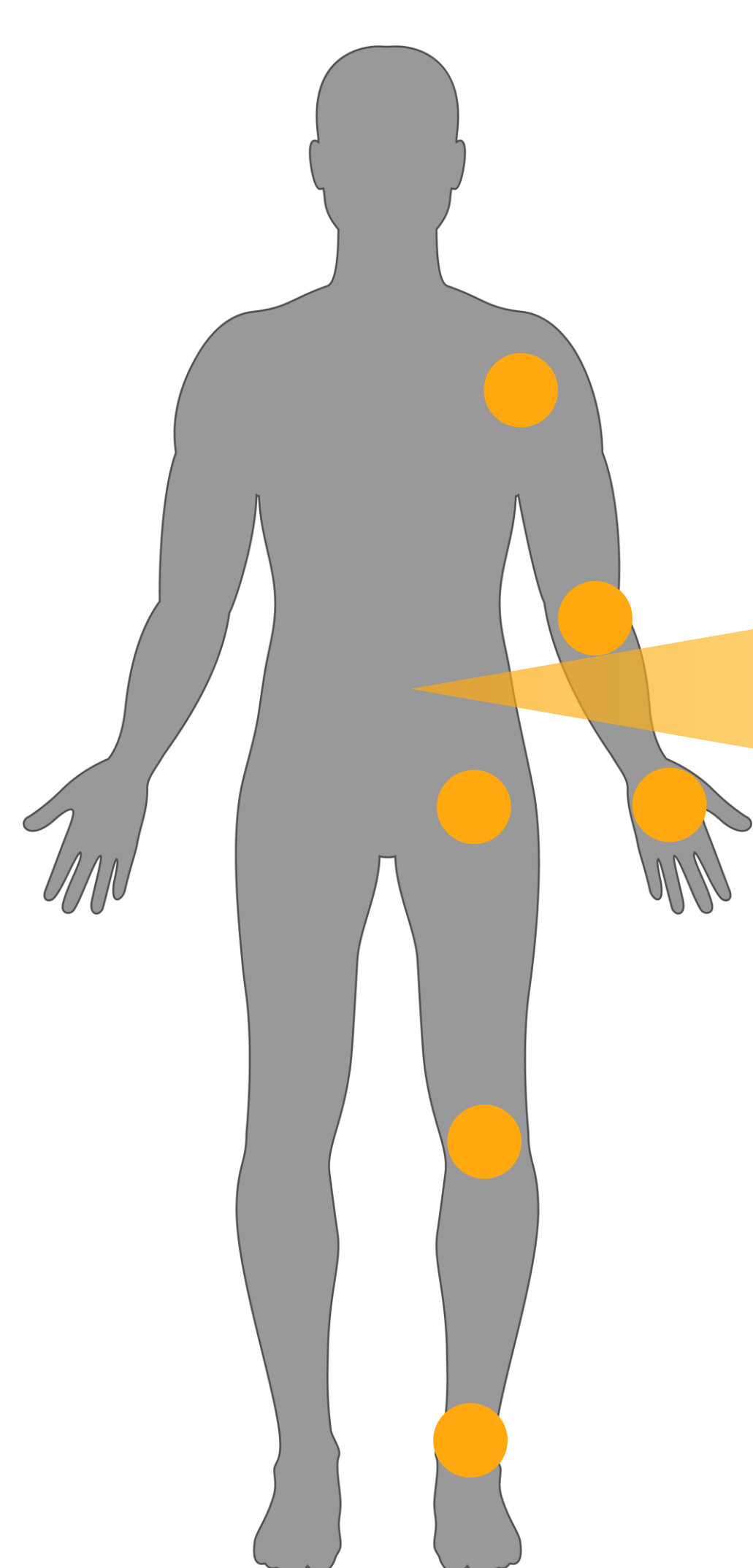
1. PROBLEMS

- >40% Affected population in Europe**¹
(musculoskeletal disease and arthritis)
- >240 Billion€ economic burden per year**²
- Only symptomatic therapy**

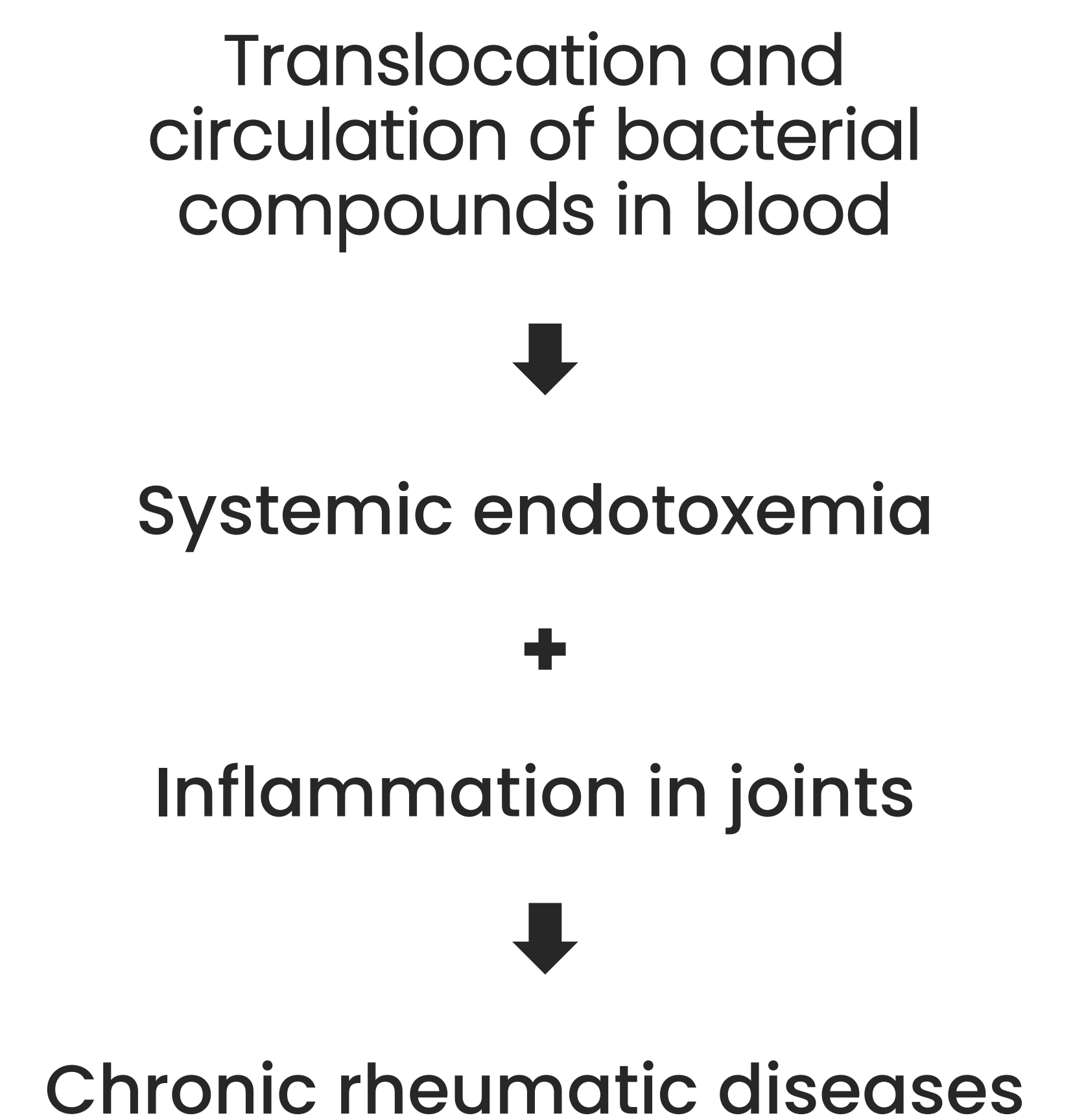
¹ <https://cordis.europa.eu/article/id/97231-ep-calls-to-recognise-the-extraordinary-burden-of-rheumatism-and-arthritis>
² European Alliance Of Associations For Rheumatology (EULAR), position paper, November 2011 (H2020 Framework Programme).

2. CAUSE

- Intestinal dysbiosis of gut microbiome**
- Increased permeability of intestine**
- Bacterial compounds in blood**



1 Gut lumen 2 Intestinal cells 3 Blood vessel



3. AIMS

- Personalised Therapies and Diagnosis**
 - Drugs
 - Digital Prediction Tools
 - Nutritional Interventions
- Identification of risk parameters**

4. SUPPORT

- 14 Partners, 8 countries**
- ~7 million € form the EU** (Horizon Europe)
+ 1.8 million € from SERI
(SERI: Swiss State Secretariat for Education, Research and Innovation)

ENDOTARGET IMPACT

- Patients**
 - Less therapeutic side effects
 - Early diagnosis & intervention
 - Improved awareness & self management towards rheumatic diseases
 - Risk reduction of chronic disease development

- Economic**
 - Decreased healthcare costs
 - Efficient allocation of saved healthcare costs
 - Reduction of disease-adjusted life years associated with rheumatic disease

- Clinicians**
 - Supporting tool for disease prediction & therapy selection
 - Personalised treatment of rheumatic diseases