

Empowering clinicians and patients in the fracture healing journey

OSORA
MEDICAL FRACTURE ANALYTICS

Gefördert durch:



Bundesministerium
für Wirtschaft
und Technologie



EXIST
Existenzgründungen
aus der Wissenschaft



ESF
Europäischer Sozialfonds
für Deutschland



Europäische
Union



Zusammen.
Zukunft.
Gestalten.



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About us

OSORA in a sentence

OSORA is a software tool that provides doctors and patients with a prediction of the healing process during post-operative assessment of fracture treatment

Our vision

Providing a better treatment and an improved outcome for the patient through prediction of the fracture healing process

Our goals for Startup Commons Ulm

1 Pushing the Business Plan

Please challenge our concept, your feedback is invaluable for the development of our roadmap!

2 Learn from other Startup teams

Your team is pushing to investor readiness or was already successful in acquiring funding? We want to learn from your experiences!

3 Expand the network

We are looking for contacts who recognize their work, field or company in the topic of fracture healing simulation.



Your contact at the venue & beyond

Dr. Andreas Arnegger

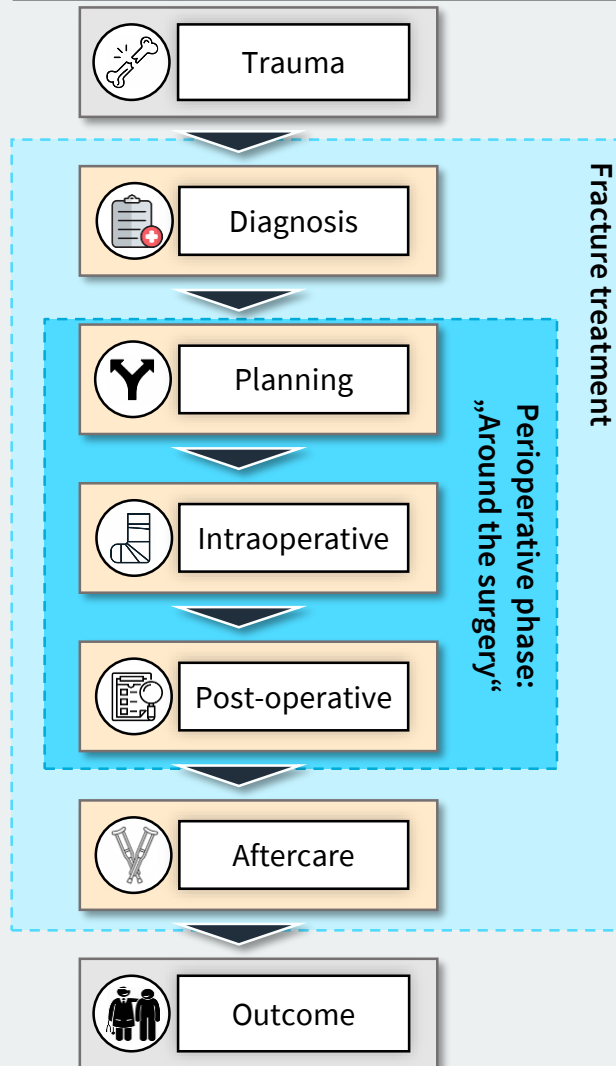
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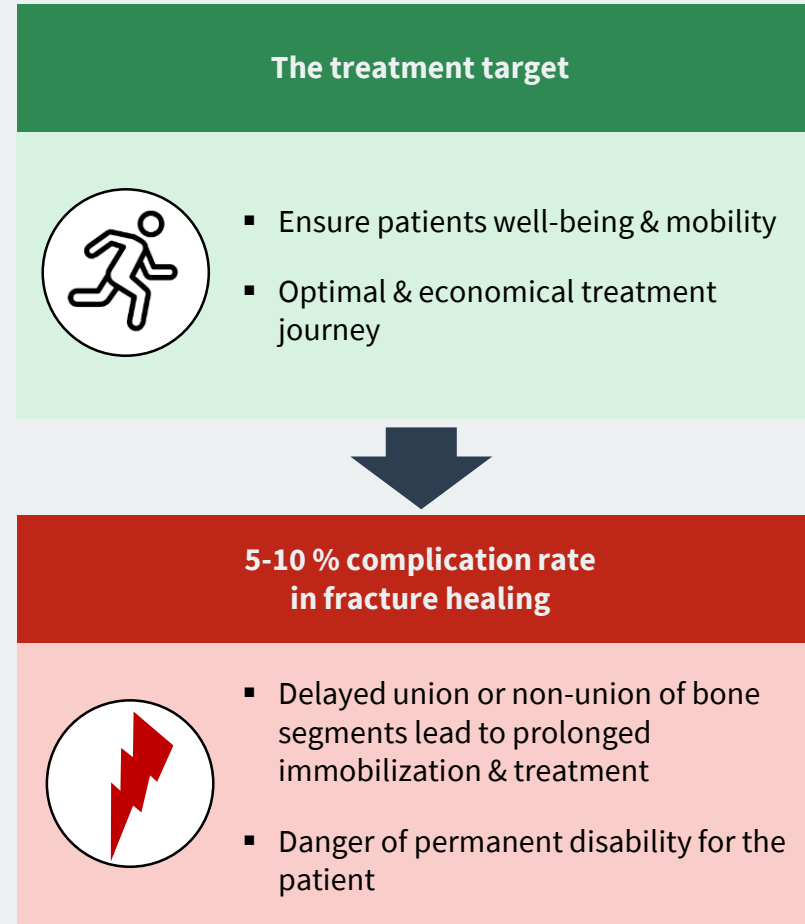
Topic	Status
Domain & sector	Digital Health at the intersection of radiology, surgery & orthopaedics
Development status	Running software framework for the simulation of diaphyseal long bone fractures
Funding	EXIST Forschungstransfer: April 2021 – September 2022
Website & Social media	www.osora.eu https://www.linkedin.com/company/osora
Roots & background	Building on 25 years of fracture healing simulation research at Ulm University
Business model	B2B strategy, with licensing models for on-premise deployment, SaaS for cloud applications
Company form	Founding planned for spring 2022

Our mission: Supporting physicians & patients

From broken bone to full healing



The Problem: Differences during fracture healing



The Challenge: Individual healing potentials

- Through user research we identified the **clinical need for predicting the course of fracture healing**
- Enable clinicians to **use more patient specific information** for therapy planning

Fundamental requirements for the solution

- A **tool for risk assessment** and early complication detection
- Seamless integration into the **clinical workflow**

The solution: Empowering patient & surgeon with a predictive healing simulation

The screenshot shows the OSORA patient simulation interface for Jill Tracy, managed by Christopher Turk. The interface includes a sidebar with navigation options: Home, Patient Overview, Surgery Report, Post Operative Analysis (highlighted), and Examination Schedule. The main content area displays patient data (Name: Jill Tracy, Age: 37, Date of surgery: 27 August 2021, Fracture: Left Femur - 32A2, Treatment: Intermedullary nail - DePuy Synthes LFN9 380mm), a 3D visualization of the femur with a blue area indicating the fracture site, and a graph titled 'Interfragmentary Movement' showing movement over 180 days. The graph shows a sharp initial drop in movement followed by a gradual decline. Pre and post-operative X-ray images are also visible.

The benefits: Faster mobilization and holistic healing

- Assessing the **complication risk** & urgency for immediate revision surgery
- Forecasting the treatment duration for better **aftercare planning**
- Estimating load capacity & **training force** for mobilization & improved healing
- Illustration of the **therapy process** for the patient

Scalable along the clinical value chain

1	For the patient	▪ Better understanding and compliance
2	For the treating physician	▪ Decision support along the fracture journey
3	For MedTech companies	▪ Better implant fitting and installation
4	For medical staff	▪ Practice method & treatment for training and education
5	For follow-up care specialists	▪ Promote healing through appropriate therapy coordination

The OSORA Unique Selling Point

- In contrast to static diagnostic procedures, OSORA is a **predictive simulation tool** that enables a dynamic prognosis of individual fracture healing over time
- We aim for the identification of complications before they become recognizable through symptoms

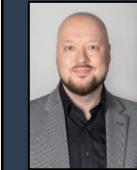
Our expertise & experience

M.Sc. Lucas Engelhardt



7+ years experience in fracture healing and computational modelling

Dr. biol. hum. Frank Niemeyer



14+ years experience in biomechanics and simulations

M.Sc. Frederik Walter



5+ years experience in product development

Dr. oec. Andreas Arnegger



7+ years experience in business development and strategy