

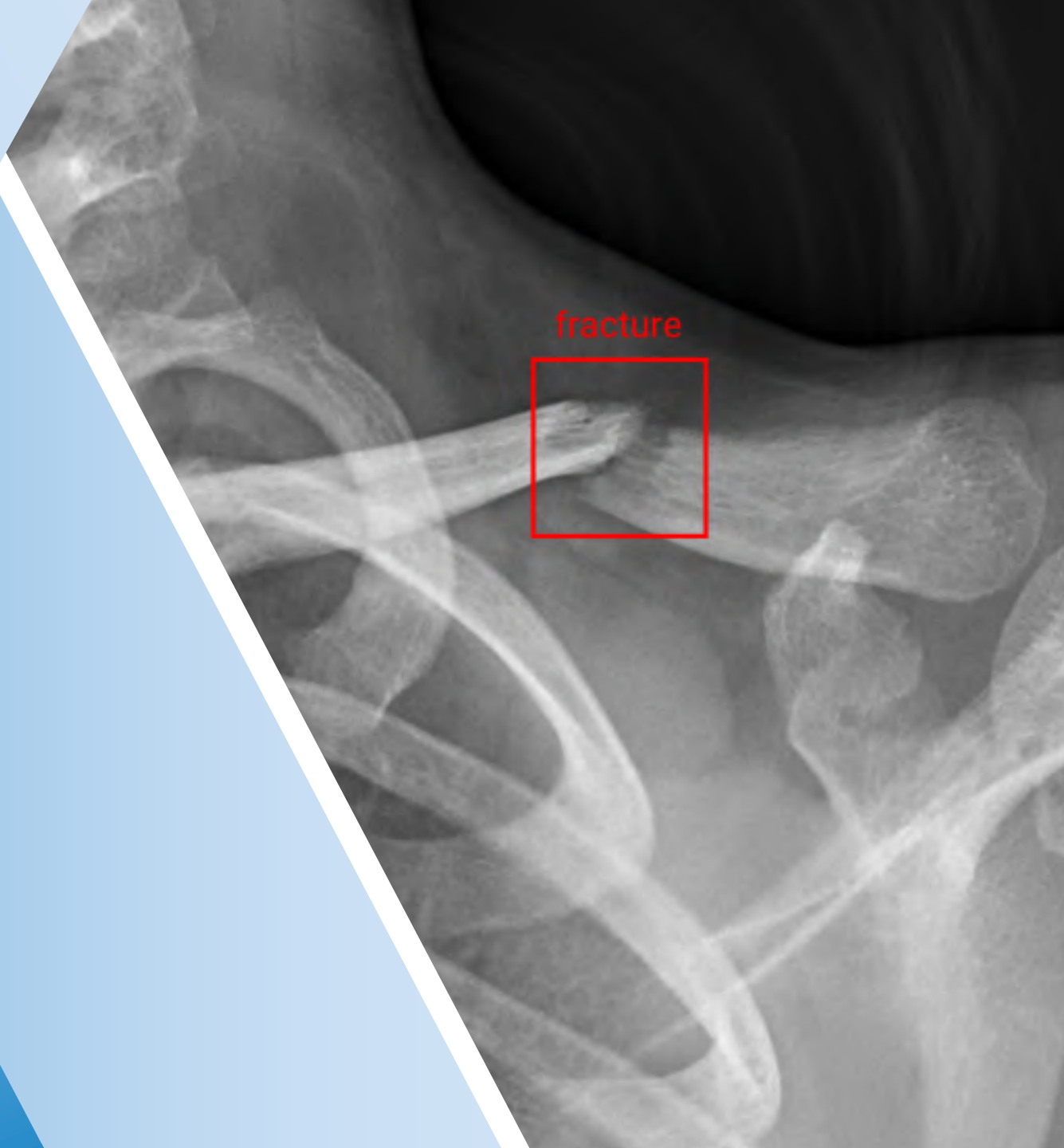


# Optimize your workflow with Artificial Intelligence

---

**RAYVOLVE** | A high-performance computer-aided  
diagnosis tool that detects all types of fractures on  
x-rays

October 2020



# HEALTHCARE CHALLENGES

Explosion of the number of medical imaging procedures



On average

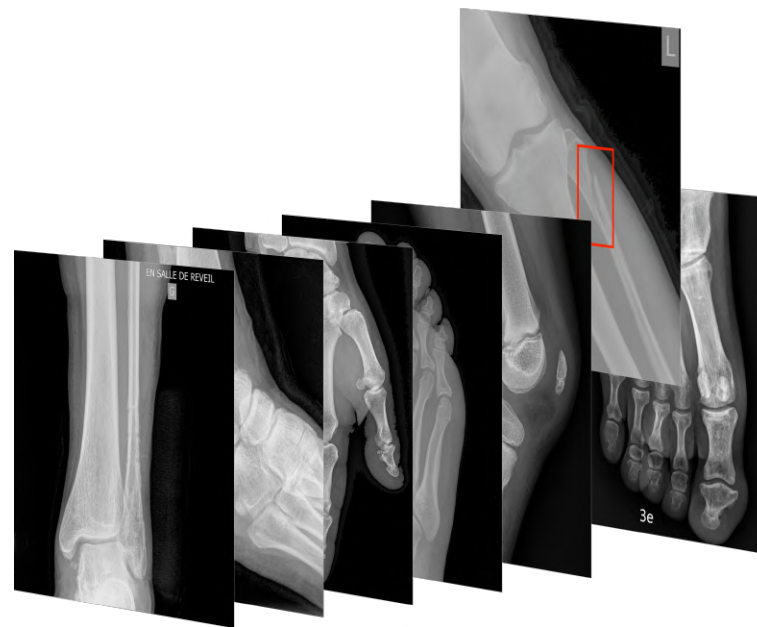
## 92%

Of x-rays do not show fractures

Evolution in Europe in 10 years

**+100%**  
Medical  
images

**+2%**  
Doctors



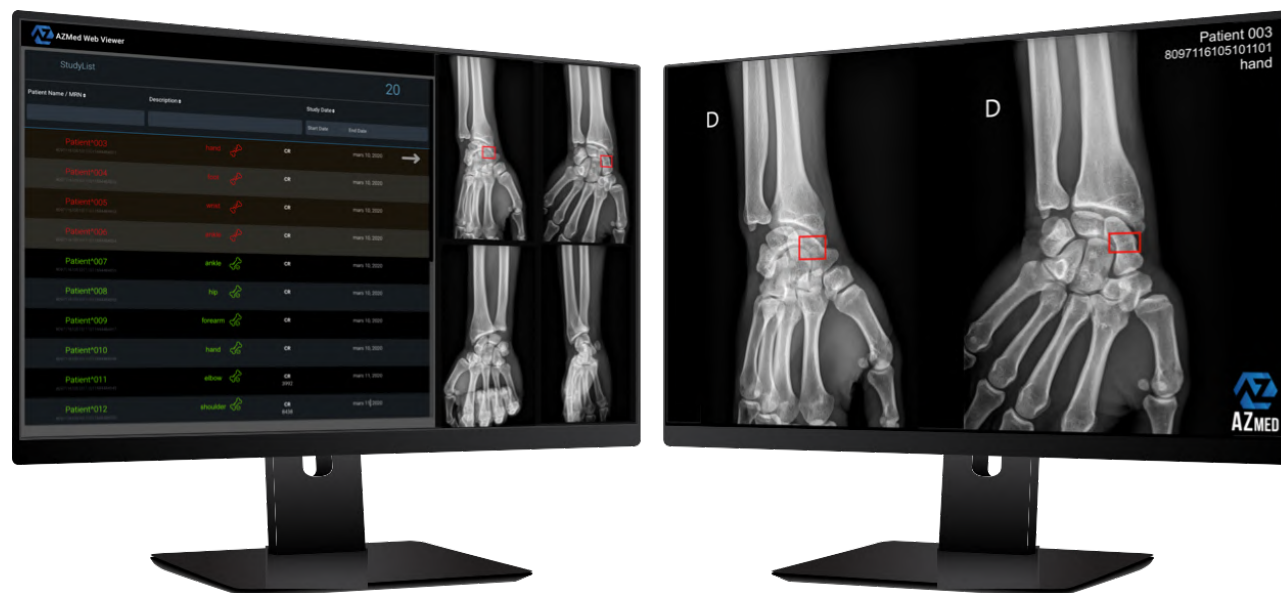
*Augmenting doctors with the power of AI*

# RAYVOLVE

High-performance solution based on Artificial Intelligence

# 1<sup>st</sup>

AI medical device CE-marked in France in its category



**Automatic detection**  
of bone fractures



**Sorting of exams**  
by priority order



**Smooth integration**  
on all types of viewers

*Augmenting doctors with the power of AI*

# RAYVOLVE

State-of-the-art Deep Learning algorithm

## 1 Million

x-rays collected to train the algorithm



### 2 years of R&D

for the development of the first algorithm



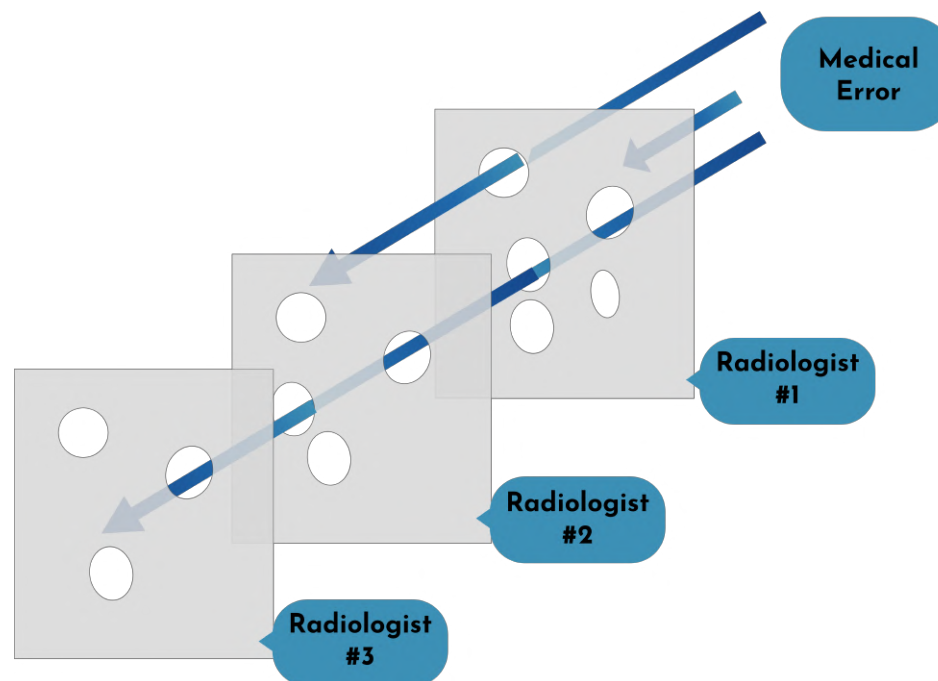
### 3 radiologists

involved in the annotation of each image



### Quality system

compliant with ISO 13 485 standard



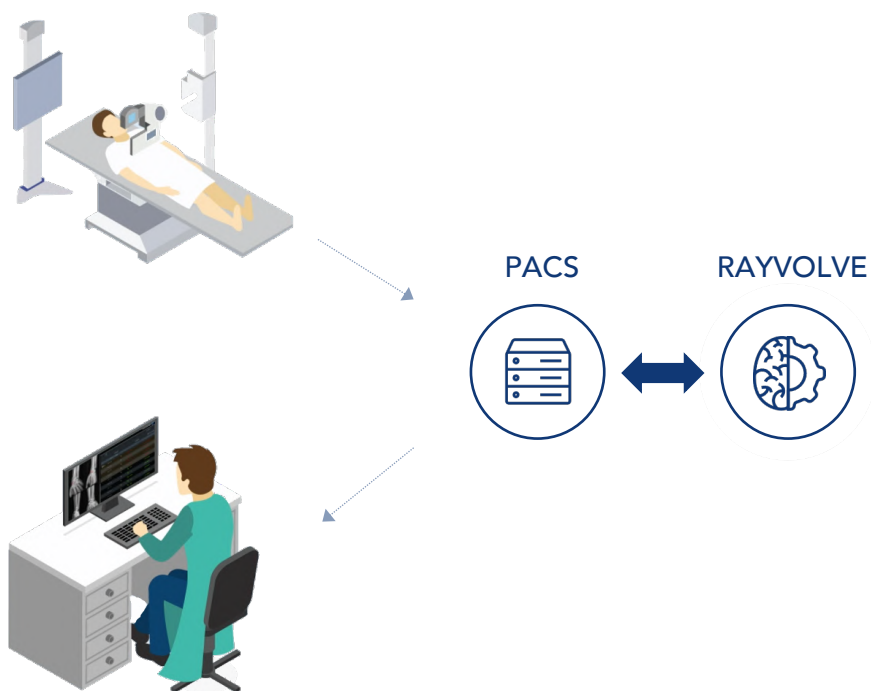
*Augmenting doctors with the power of AI*

# ERGONOMICS

100 % integrated into doctor's workflow and connected directly to the PACS

< 1 Sec

time required to generate the predictions



Nothing changes regarding your habits :

- Predictions automatically generated on your own viewer in the same DICOM series
- Without any additional click

Study list

INVESTIGATIONAL USE ONLY Options

Series

Stack Scroll

Zoom

Levels

Pan

Length

Annotate

Angle

Reset

CINE

More

Layout

Measurements

S: 4 I: 4 1



S: 5 I: 5 1



S: 6 I: 6 1



S: 7 I: 1 1



Patient, 004  
809711610510111011694484852

Mar 10, 2020

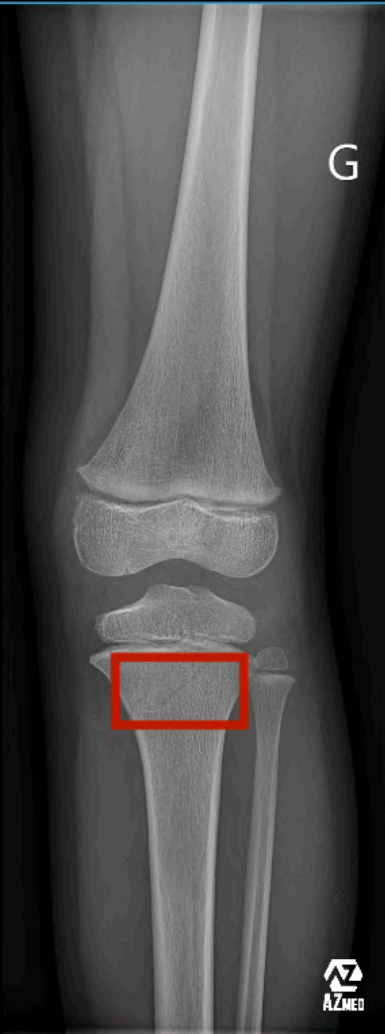


Ser: 5  
784 x 2093

Zoom: 36%  
W: 4095 L: 2048  
Lossless / Uncompressed

Patient, 004  
809711610510111011694484852

Mar 10, 2020



Ser: 6  
784 x 2093



Zoom: 36%  
W: 4095 L: 2048  
Lossless / Uncompressed



Study list

INVESTIGATIONAL USE ONLY Options ▾

Series

Stack Scroll

Zoom

Levels

Pan

Length

Annotate

Angle

Reset

CINE

More ▾

Layout

☰

Measurements



S: 2 I: 2 1



S: 7 I: 7 1



S: 8 I: 8 1

Patient, 005  
809711610510111011694484853



Ser: 7  
1241 x 2374

Mar 10, 2020

Patient, 005  
809711610510111011694484853



Ser: 7  
1241 x 2374

Mar 10, 2020

Zoom: 32%  
W: 4095 L: 2048  
Lossless / Uncompressed

Zoom: 32%  
W: 4095 L: 2048  
Lossless / Uncompressed

# AZ ANALYTICS

A monthly report set up according to your needs

ANALYSE

UNDERSTAND

DECIDE

- Provides an overview of your entire activity
- Allows you to make clear decisions about your organisation





# CLINICAL STUDIES

Scientifically validated performances

● On average

**96%** sensibility / patient

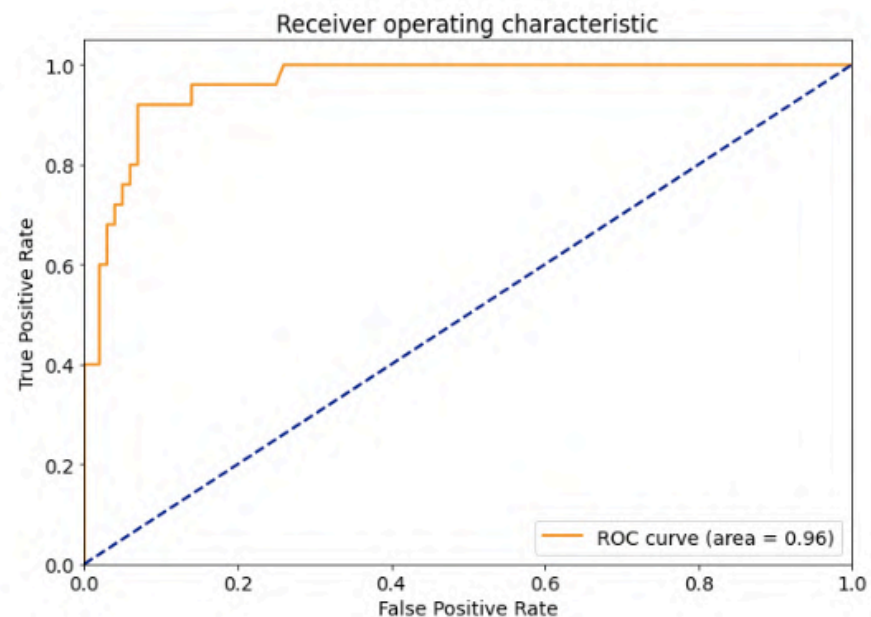
**86%** specificity / patient



**Cohort of 125 patients**  
in emergency department



**Presented at ECR 2020**  
European Congress of Radiology



*Augmenting doctors with the power of AI*

# CLINICAL STUDIES

Scientifically validated performances

● On average

**36%** time saved

**+20,6%** sensibility / patient



## 1000 images

collected from 7 radiology centers (500 analyzed with Rayvolve and 500 analyzed without Rayvolve)



**7 senior radiologists**  
have participated in the study



**+ 8% specificity / patient**



**+ 7,2% AUC**

# PARTNERS

Personalized support at all stages of the software implementation

> 85

healthcare institutions partner  
(group of radiology centers, clinics,  
university hospitals)

## AMONG OUR PARTNERS



« In practice, Rayvolve provides accurate fracture detection. The automatic classification in the RIS of the abnormal cases gives us a major advantage in our patient flow management. »

**Dr. Gregory Lenczner** – Partner Radiologist RPO  
President Drim France IA & Vice president FNMR

# CONTACT US

## BASTIEN MANCEAU

Head of Partnerships  
+33 6 31 47 04 38  
bastien@azmed.co

## Address

65 rue Sainte-Anne 75002 Paris

*Augmenting doctors with the power of AI*



**techstars**