



Fracture Management Overview

Post Fracture Care (PFC)



Capturing critical globally-recognized PFC key performance indicators in a digital tool to help PFC programs improve the effectiveness of their program and increase patient outcomes

Werner Fehn CEO

info@bonemonitor.com

+32 87 840 550

Route Zénobe Gramme 39

4821 Dison · Belgium

www.bonemonitor.com



Endorsed by



Management Summary (1/2)



- » A browser-based in-house service in the FLS center, which helps doctors, nurses and administrative staff to manage all work – related to patients and processes – more effectively
- » KPIs dashboard to measure and optimize the associated processes and track performance
- » Optimized workflow to reduce administrative overhead and double work
- » A significant reduction of costs for human resources
- » Optimal patient care through task-driven workflow

Management Summary (2/2)

Digital Tool

A user-friendly software solution



Multiple Languages supported

-  English
-  Spanish
-  Portuguese
-  French
-  German
-  Italian
-  Russian
-  Turkish
-  Danish
-  Dutch





Features and Functionalities

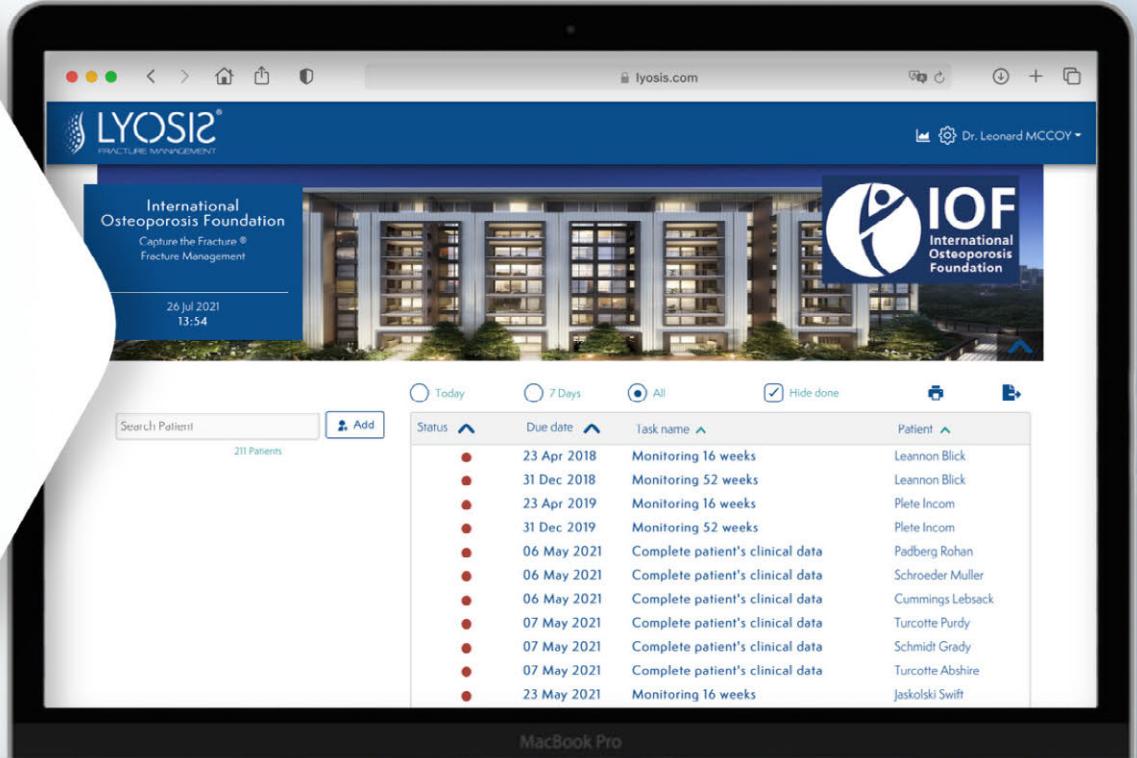
- » General
- » Dashboard
- » Administrative
- » Clinical
- » Letter generation
- » Tasks
- » Hospital backend
- » CSV/PDF export function
- » Backup function





Dashboard

- » Open tasks
- » Add patient
- » Search patients
- » Search results
- » Various filters & export functions



A screenshot of a MacBook Pro displaying the LYOSIS® Fracture Management software interface. The screen shows a dashboard with a blue header featuring the LYOSIS logo and "International Osteoporosis Foundation" branding. Below the header is a photograph of a modern building at night. The main area contains a search bar, a patient count of "211 Patients", and a table of tasks. The table has columns for Status, Due date, Task name, and Patient. The "Status" column uses red dots for completed tasks. The "Due date" column lists dates from 2018 to 2021. The "Task name" column includes "Monitoring 16 weeks", "Monitoring 52 weeks", "Monitoring 16 weeks", "Monitoring 52 weeks", "Complete patient's clinical data", and "Monitoring 16 weeks". The "Patient" column lists names such as Leannon Blick, Plete Incom, Padberg Rohan, Schroeder Muller, Cummings Lebsack, Turcotte Purdy, Schmidt Grady, Turcotte Abshire, and Jaskolski Swift. At the bottom of the screen, the text "MacBook Pro" is visible.

Status	Due date	Task name	Patient
●	23 Apr 2018	Monitoring 16 weeks	Leannon Blick
●	31 Dec 2018	Monitoring 52 weeks	Leannon Blick
●	23 Apr 2019	Monitoring 16 weeks	Plete Incom
●	31 Dec 2019	Monitoring 52 weeks	Plete Incom
●	06 May 2021	Complete patient's clinical data	Padberg Rohan
●	06 May 2021	Complete patient's clinical data	Schroeder Muller
●	06 May 2021	Complete patient's clinical data	Cummings Lebsack
●	07 May 2021	Complete patient's clinical data	Turcotte Purdy
●	07 May 2021	Complete patient's clinical data	Schmidt Grady
●	07 May 2021	Complete patient's clinical data	Turcotte Abshire
●	23 May 2021	Monitoring 16 weeks	Jaskolski Swift





Full Version

- » All defined functions
- » Light and full version using same database
- » Can be switched any time in the hospital context

A screenshot of a MacBook Pro displaying the LYOSIS Clinical Assessment software. The interface shows a patient record for "Leannon BLICK" with ID "seeder-008-00-9400" born on "14 Mar 1958". The user is in the "Clinical Content > Clinical Assessment" section. The "Index fracture" section is active, showing details like date diagnosed (2018), location (SHOULDER, UPPER ARM, FOREARM), type (FRAGILITY), residence (FAMILY HOME), and how identified (OTHER CLINIC). A table for "Other previous fragility fracture" is partially visible at the bottom. The sidebar on the left lists various clinical modules such as Administrative, Clinical Content, Clinical Assessment, Index fracture, Previous fragility, Previous risk factors / DX score, Vertebral fracture, Previous osteoporosis therapy, Comorbidities (specific that require exclusion), Comorbidities - General, Falls risk factors, Estimated daily calcium intake, Examination findings, Bone density results, Laboratory test results, and Other Medications and.



- » Reduced set of data fields
- » Simplified GUI
- » Less administration overhead
- » Free definable subset of the full version
- » Light&full version using same database
- » Can be switched any time in the hospital contexts

A screenshot of a MacBook Pro displaying the LYOSIS Clinical Content software. The window title is "LYOSIS® CLINICAL CONTENT". The main content area shows treatment recommendations for a patient named "Leannon BLICK".

Clinical Content > Treatment recommendations

1. Anti-osteoporosis therapy

Inappropriate
Don't know
Informed decline
Referred to primary care physician to decide
Referred for further clinical opinion
Drugs

2. Calcium and vitamin D supplementation

Supplement name: _____
Dose: _____
Duration(Y): _____
For life:

3. Falls intervention recommendations

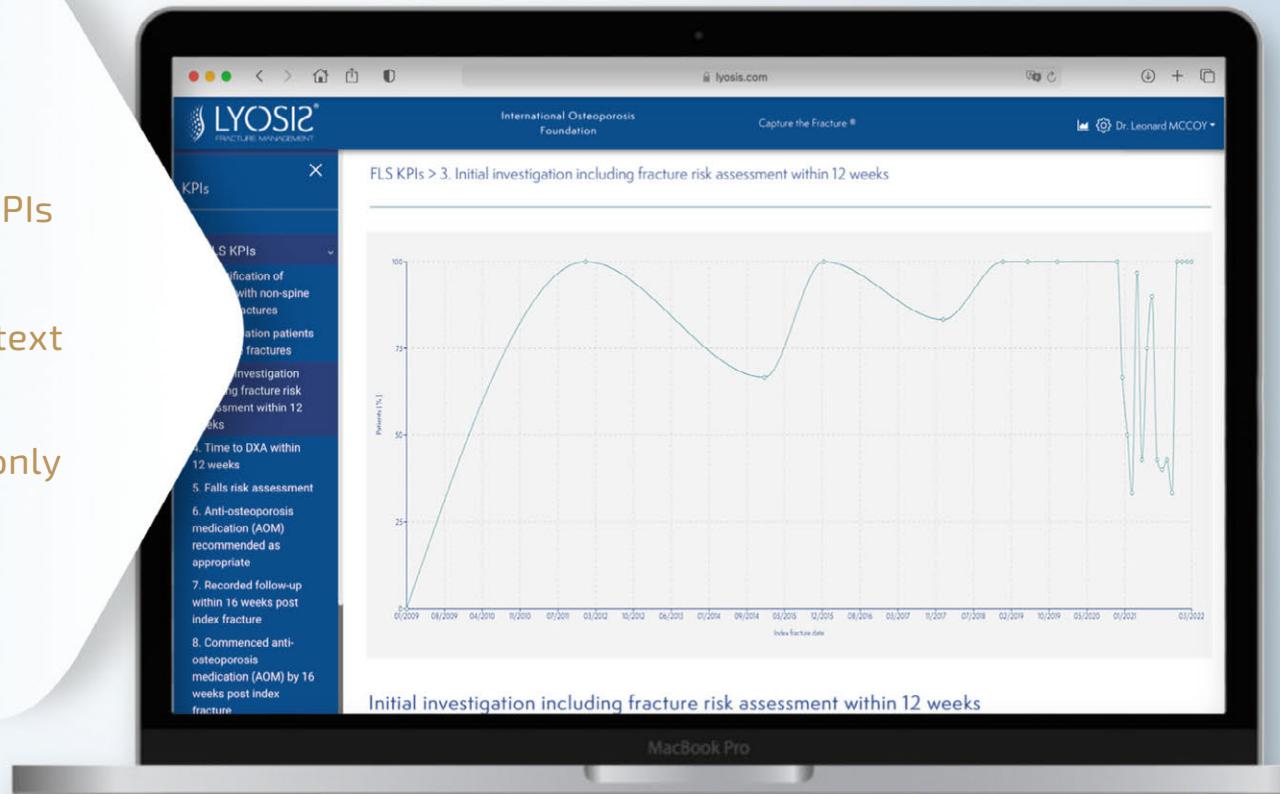
Referral to falls service:	<input type="radio"/> No	<input type="radio"/> Yes	<input type="radio"/> Not required	<input checked="" type="radio"/> Don't know
Strength and Balance:	<input type="radio"/> No	<input type="radio"/> Yes	<input type="radio"/> Not required	<input checked="" type="radio"/> Don't know
Vision assessment:	<input type="radio"/> No	<input type="radio"/> Yes	<input type="radio"/> Not required	<input checked="" type="radio"/> Don't know
Home occupational therapy:	<input type="radio"/> No	<input type="radio"/> Yes	<input type="radio"/> Not required	<input checked="" type="radio"/> Don't know
Medication review:	<input type="radio"/> No	<input type="radio"/> Yes	<input type="radio"/> Not required	<input checked="" type="radio"/> Don't know

MacBook Pro



Display Key Performance Indicators (KPIs)

- » Predefined KPIs
- » Visible in the hospital context
- » Visible for FLS admins only





Patient-Level Key Performance Indicators

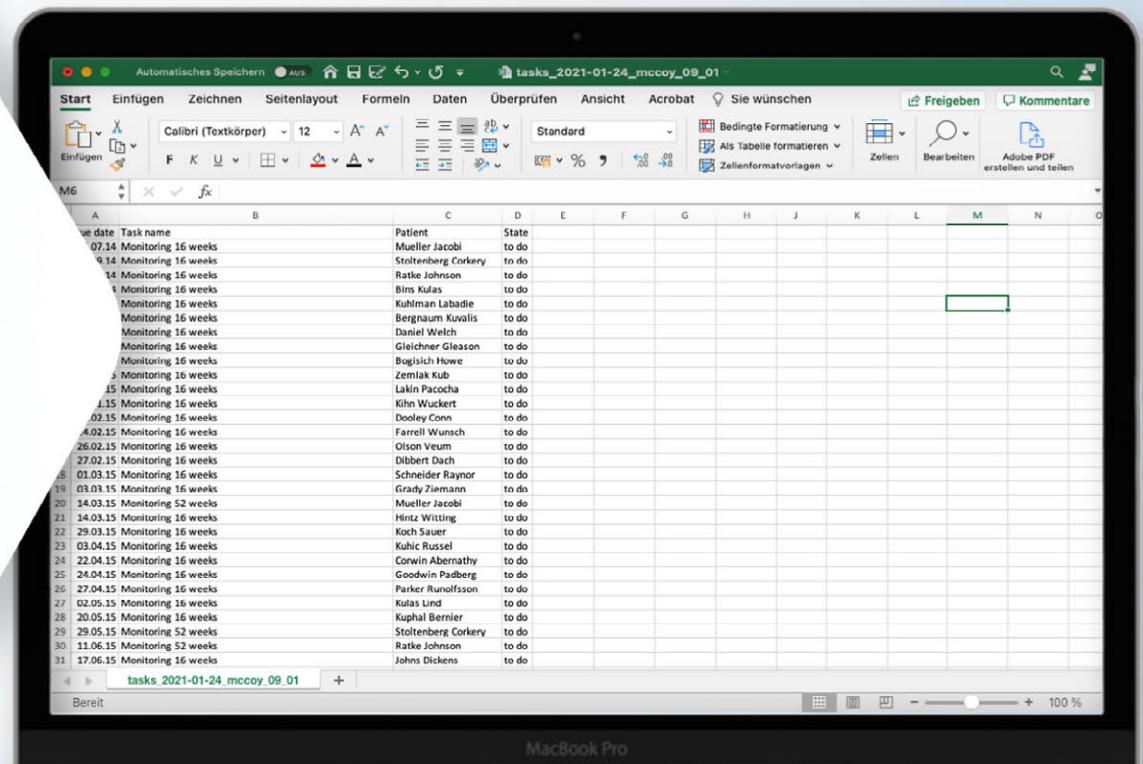


11 KPIs developed as a complement to the Best Practice Framework to measure FLS effectiveness and guide **quality improvement**



Excel-CSV export of tasks and search results

- » Task list
- » Search results
- » Filter functionality

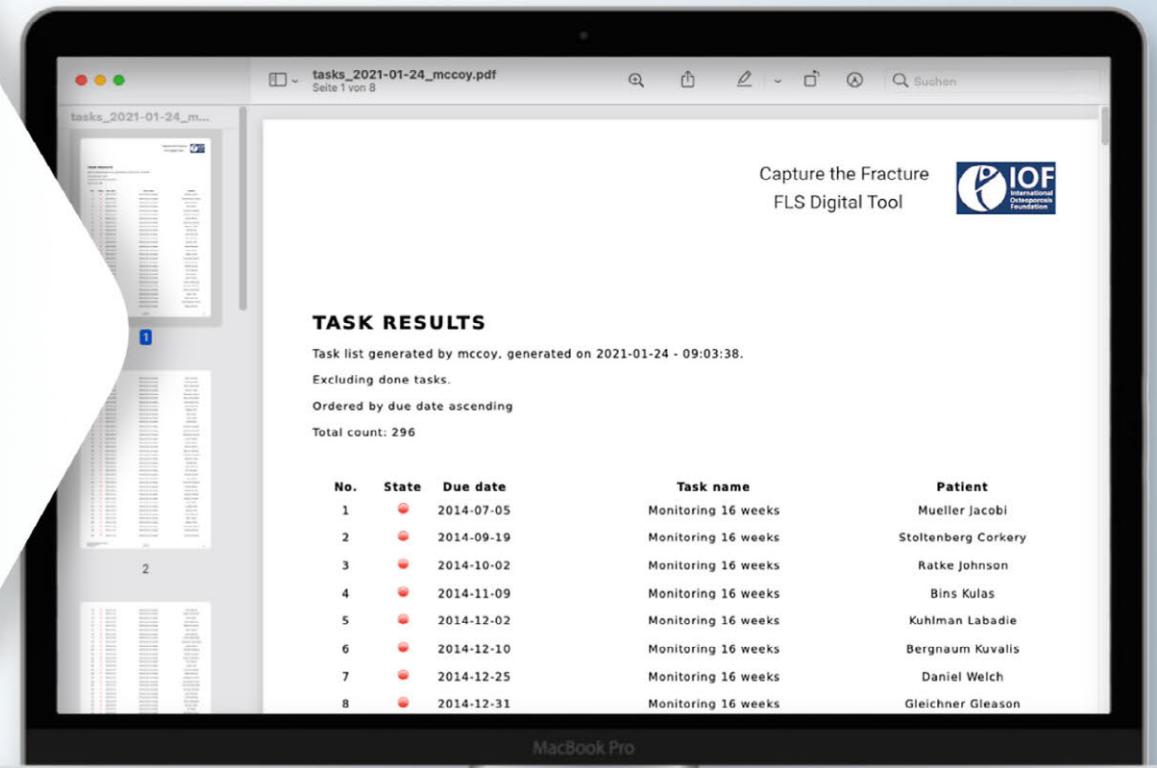


The screenshot shows an Excel spreadsheet titled "tasks_2021-01-24_mccoy_09_01". The spreadsheet contains two columns of data: "Task name" and "Patient". The "Task name" column lists various monitoring tasks, mostly "Monitoring 16 weeks", with some exceptions like "Monitoring 52 weeks". The "Patient" column lists names such as Mueller Jacobi, Stoltzenberg Corkery, Ratke Johnson, Bins Kulas, Kuhlman Labadie, Bergnauw Kualis, Daniel Welch, Gleicher Gleason, Bogisich Howe, Zemlak Kub, Lakin Pacocha, Kihn Wuckert, Dooley Conn, Farrell Wunsch, Olson Veum, Dibbert Dach, Schneider Raynor, Grady Ziemann, Mueller Jacobi, Hinz Witting, Koch Sauer, Kuhic Russel, Corwin Abernathy, Goodwin Padberg, Parker Runolfsson, Kulas Lind, Kuphal Bernier, Stoltzenberg Corkery, Ratke Johnson, and Johns Dickens. The Excel interface includes a ribbon bar with tabs like Start, Einfügen, Zeichnen, Seitenlayout, Formeln, Daten, Überprüfen, Ansicht, Acrobat, Sie wünschen, Freigeben, Kommentare, and Adobe PDF erstellen und teilen.

Issue date	Task name	Patient	State
07.14	Monitoring 16 weeks	Mueller Jacobi	to do
9.14	Monitoring 16 weeks	Stoltzenberg Corkery	to do
14	Monitoring 16 weeks	Ratke Johnson	to do
14	Monitoring 16 weeks	Bins Kulas	to do
14	Monitoring 16 weeks	Kuhlman Labadie	to do
14	Monitoring 16 weeks	Bergnauw Kualis	to do
14	Monitoring 16 weeks	Daniel Welch	to do
14	Monitoring 16 weeks	Gleicher Gleason	to do
14	Monitoring 16 weeks	Bogisich Howe	to do
14	Monitoring 16 weeks	Zemlak Kub	to do
14	Monitoring 16 weeks	Lakin Pacocha	to do
14	Monitoring 16 weeks	Kihn Wuckert	to do
02.15	Monitoring 16 weeks	Dooley Conn	to do
02.15	Monitoring 16 weeks	Farrell Wunsch	to do
26.02.15	Monitoring 16 weeks	Olson Veum	to do
27.02.15	Monitoring 16 weeks	Dibbert Dach	to do
01.03.15	Monitoring 16 weeks	Schneider Raynor	to do
03.03.15	Monitoring 16 weeks	Grady Ziemann	to do
14.03.15	Monitoring 52 weeks	Mueller Jacobi	to do
14.03.15	Monitoring 16 weeks	Hinz Witting	to do
29.03.15	Monitoring 16 weeks	Koch Sauer	to do
03.04.15	Monitoring 16 weeks	Kuhic Russel	to do
22.04.15	Monitoring 16 weeks	Corwin Abernathy	to do
24.04.15	Monitoring 16 weeks	Goodwin Padberg	to do
27.04.15	Monitoring 16 weeks	Parker Runolfsson	to do
02.05.15	Monitoring 16 weeks	Kulas Lind	to do
20.05.15	Monitoring 16 weeks	Kuphal Bernier	to do
29.05.15	Monitoring 52 weeks	Stoltzenberg Corkery	to do
11.06.15	Monitoring 52 weeks	Ratke Johnson	to do
17.06.15	Monitoring 16 weeks	Johns Dickens	to do

PDF export of tasks and search results

- » Task list
- » Search results
- » Filter functionality
- » Hospital header
- » Signed PDF



Capture the Fracture
FLS Digital Tool

IOF International Orthopaedics Foundation

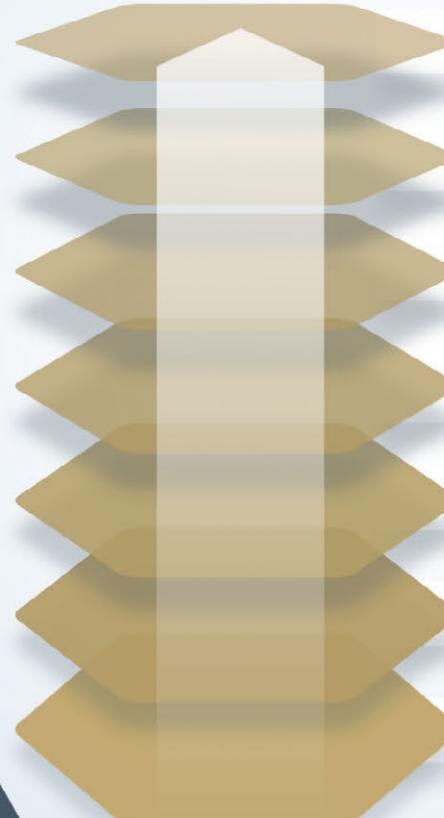
TASK RESULTS

Task list generated by mccoy. generated on 2021-01-24 - 09:03:38.
Excluding done tasks.
Ordered by due date ascending
Total count: 296

No.	State	Due date	Task name	Patient
1	●	2014-07-05	Monitoring 16 weeks	Mueller Jacobi
2	●	2014-09-19	Monitoring 16 weeks	Stoiterberg Corkery
3	●	2014-10-02	Monitoring 16 weeks	Ratke Johnson
4	●	2014-11-09	Monitoring 16 weeks	Bins Kulas
5	●	2014-12-02	Monitoring 16 weeks	Kuhlman Labadie
6	●	2014-12-10	Monitoring 16 weeks	Bergnaum Kuvalis
7	●	2014-12-25	Monitoring 16 weeks	Daniel Welch
8	●	2014-12-31	Monitoring 16 weeks	Gleichner Gleason



Maintenance Service Level Agreement (SLA)



- Fracture Management onsite installation support (remote)
- Fracture Management Version 1.x enhancements and feature upgrades
- Security platform updates and patches
- English email support
- Onboarding and technical troubleshooting
- Priority bug fixing
- Documentations and guidelines

Hardware and Software requirements

The App
will be provided
in the format

- » Linux based docker image (.tar.gz)

Hardware/VM requirements

for 100.000 patients with
10 simultaneous users

- » 4 CPU @ 2500MHz
- » 6 GB RAM
- » 200 GB HDD

Required Platforms

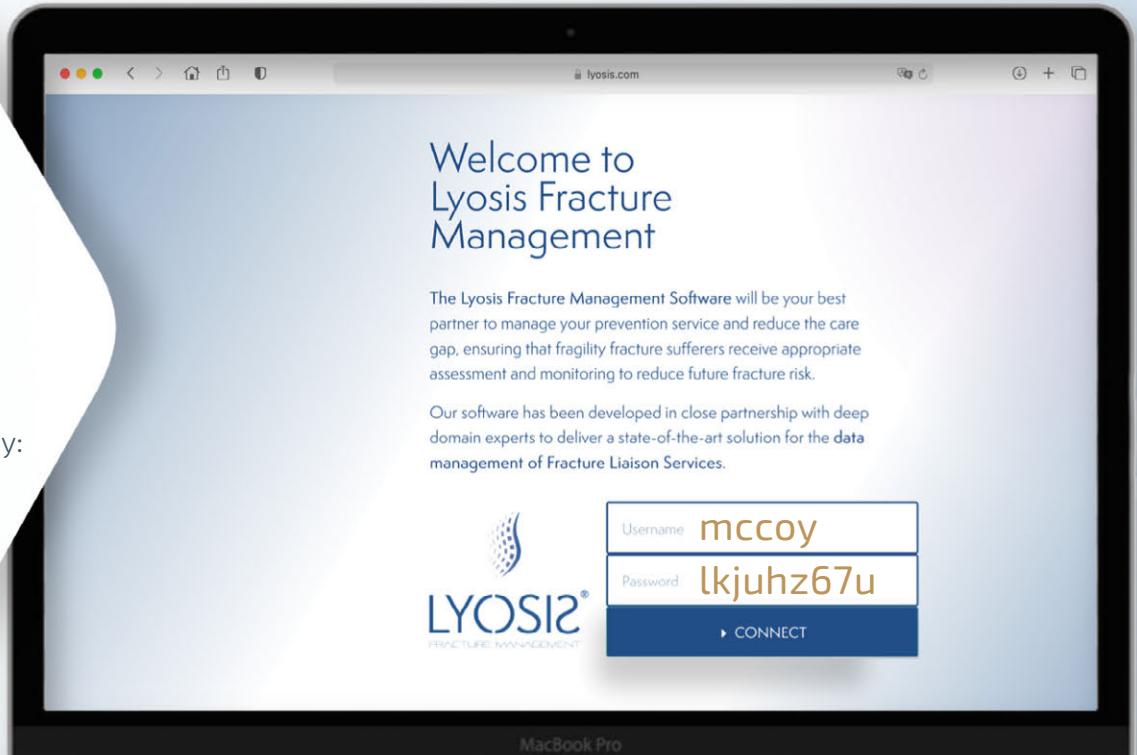
- » Linux server (recommended)
- » Windows Server
- » Mac Server



Provide us with your feedback

Test it here

- » www.lyosis.com
(Full version)
- » light.lyosis.com
(Light version)
- » Login as Dr. Leonard McCoy:
Username » **mccoy** «
Password » **lkjuhz67u** «



More Resources

- » International Osteoporosis Foundation
- » IOF Vision and Mission
- » Capture The Fracture® program
- » CTF Best Practice Framework
- » CTF Digital Tool presentation
- » CTF Resource Center
- » BoneMonitor Resource Center
- » Map of Best Practice
- » HL7/FHIR medical data exchange standard



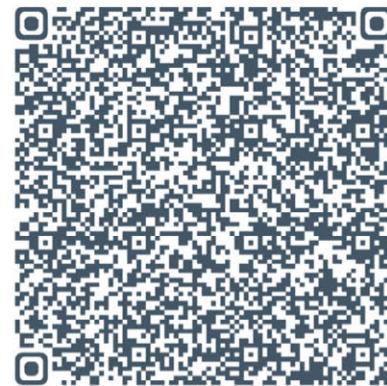
Thank you very
much for watching



www.bonemonitor.com



For any questions



vCard

Werner Fehn

werner.fehn@bonemonitor.com

Features and Functionalities (1/10)

- » General
- » Dashboard
- » Administrative
- » Clinical
- » Letter generation
- » Tasks
- » Hospital backend
- » CSV/PDF export function
- » Backup function



Features and Functionalities (2/10)



» General

» Dashboard

» Administrative

» Clinical

» Letter generation

» Tasks

» Hospital backend

» CSV/PDF export

» Backup function

- » Local web based application
- » Java / SQL / Docker based
- » CTF Database structure
- » Data validators
- » Data accuracy checker (Business Intelligence)
- » Data cryptization
- » Patients privacy (EU-GDPR in preparation)
- » 400+ Database characteristics
- » Workflow management
- » FHIR/HL7 Data import/ export (coming soon)

- » Translatable into other languages
 - » English ready
 - » French in preparation
 - » Others possible
- » Accessible from
 - » Windows, Mac OS or Linux
 - » Tablet computer
 - » Browser: Edge, Safari, Firefox & Chrome
- » Cloud based marketing platform for testing
- » Full and light version (switchable in field)



Features and Functionalities (3/10)

- » General
 - » **Dashboard**
 - » Administrative
 - » Clinical
 - » Letter generation
 - » Tasks
 - » Hospital backend
 - » CSV/PDF export
 - » Backup function
-
- » Add patient
 - » Patient search
 - » All (open) tasks to do
 - » Various filters and export functions
 - » Customizable background picture

Features and Functionalities (4/10)

- » General
- » Dashboard
- » **Administrative**
- » Clinical
- » Letter generation
- » Tasks
- » Hospital backend
- » CSV/PDF export
- » Backup function

- » Primary care physician
- » Patient information
- » Contact for monitoring
- » Insurance coverage

Features and Functionalities (5/10)

- » General
- » Dashboard
- » Administrative
- » Clinical
 - » Letter generation
 - » Tasks
 - » Hospital backend
 - » CSV/PDF export
 - » Backup function

- » Clinical Assessment
 - » Index fracture
 - » Other previous fragility fracture
 - » Fracture risk factors / FRAX score
 - » Vertebral fracture features
 - » Previous osteoporosis therapy
 - » Comorbidities – General
 - » Fall risk factors
 - » Calcium intake
 - » Examination findings
- » Bone Density Results
- » Laboratory test results
 - » Core tests
 - » Additional tests
- » Current Data
- » Treatment recommendations
 - » Anti-osteoporosis therapy
 - » Calcium and vitamin D supplementation
 - » Falls intervention recommendations
- » Monitoring
 - » 16 weeks monitoring
 - » 52 weeks monitoring
 - » (Timeframes are configurable)

Features and Functionalities (6/10)

- » General
- » Dashboard
- » Administrative
- » Clinical
 - » Letter generation
 - » Tasks
 - » Hospital backend
 - » CSV/PDF export
 - » Backup function

- » Did not attend
- » FLS evaluation and treatment recommendation
- » General note to physician
- » Invitation for DXA
- » Invitation for FLS assessment
- » Monitoring outcome 16 weeks
- » Monitoring outcome 52 weeks
- » Change in treatment recommendation (Patient)
- » Change in treatment recommendation (Physician)
- » Treatment recommendation
- » Out of area letter

Features and Functionalities (7/10)

- » General
- » Dashboard
- » Administrative
- » Clinical
- » Letter generation
- » Tasks
 - » Hospital backend
 - » CSV/PDF export
 - » Backup function

- » **Patient related tasks**
- » **With various filters**
- » **Export functions**



Features and Functionalities (8/10)

- » General
 - » Dashboard
 - » Administrative
 - » Clinical
 - » Letter generation
 - » Tasks
 - » Hospital backend
 - » CSV/PDF export
 - » Backup function
- » Setup of all FLS related settings
 - » Background Picture configuration
 - » Roles Management
 - » Users Management
 - » Rights Management
 - » Hospital KPIs



Features and Functionalities (9/10)

- » General
- » Dashboard
- » Administrative
- » Clinical
- » Letter generation
- » Tasks
- » Hospital backend
- » CSV/PDF export
- » Backup function

- » Tasks list
- » Search results
- » Filter functionality
- » Hospital header
- » Digitally signed PDF

Features and Functionalities (10/10)

- » General
- » Dashboard
- » Administrative
- » Clinical
- » Letter generation
- » Tasks
- » Hospital backend
- » CSV/PDF export
- » **Backup function**

- » Daily backup of data
- » Daily backup of full Image