**TBS iNsight v3.0**

**Enhance the Prediction of Patients’ Fracture Risk**

**Boost the Performance of Bone Densitometry & Add Value to Your Clinical Practice**

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**TBS iNsight v3.0 Features**

- Automatic detection of compatible AP spine DXA scans
- Evaluates an index of microarchitecture in routine clinical practice by analyzing AP spine scans
- Automatically incorporates FRAX adjusted for TBS
- Monitoring trend curve including LSC
- Allows retrospective analysis of patient BMD database
- User interface, patient report available in various languages
- Online training & certification
- TBS DICOM module required for communication with PACS systems (optional)
- TBS iNsight software license is assigned to a specific DXA system serial number and is calibrated using a dedicated TBS phantom
- TBS iNstats module included (information on back page)

**FAST:** no additional scan time, immediate results  
**SAFE:** no additional radiation to patients. TBS derived from routine DXA exams  
**EASY:** automatic TBS report with BMD, TBS, FRAX adjusted for TBS  
**DIFFERENTIATES** DXA clinics and can increase patient referrals

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**Compability**

<table>
<thead>
<tr>
<th>GE Lunar Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of current compatible bone densitometers with TBS iNsight</td>
</tr>
<tr>
<td>iDXA™ Series (all models)</td>
</tr>
<tr>
<td>List of current BMD software versions compatible with TBS iNsight</td>
</tr>
<tr>
<td>enCORE™ versions from 8.10 to 17.01</td>
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**Ethnicity reference curves include**

<table>
<thead>
<tr>
<th>Ethnicities</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>European</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>American Caucasian*</td>
<td>x</td>
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<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Japanese</td>
<td>x</td>
<td>-</td>
</tr>
</tbody>
</table>

*NHANES

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**Clinical Validation**

- More than 220 peer-reviewed publications
- Already included in international and national guidelines (e.g. ISCD, ESCEO, DVO, NOGG)
- TBS adjusted FRAX (approved by FDA)
- Thousands of TBS users worldwide

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**Improve Identification of Patients’ Fracture Risk with TBS**

TBS iNsight™ - an advanced imaging software for bone densitometers (DXA) - enhances the ability to predict osteoporotic fracture risk. The result - expressed as a Trabecular Bone Score (TBS) - derives from a patented algorithm that evaluates pixel gray-levels and spatial variations in the AP spine DXA scan, providing an indirect, yet highly correlated, index of bone microarchitecture that is mostly independent of bone mineral density (BMD), clinical risk factors and FRAX®.

TBS’ maximal impact is observed in patients with osteopenic/normal BMD values who display low TBS scores and consequently have a higher combined risk profile. Furthermore, when added to FRAX, TBS’ greatest utility is seen in patients whose BMD is close to an intervention threshold.

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Since the system has not been calibrated using a dedicated TBS phantom, the results must not be used for diagnostic purpose.

**Date of analysis:** 08/01/2016  
**TBS version:** 3.0.1.0  
**DXA:** GE-Lunar iDXA #1  
**DXA file:** “ngh8bo001.mex”

The software does not diagnose disease or recommend treatment regimens. Only the health care professional can make these judgments.

Overall fracture risk will depend on many additional factors that should be considered before making diagnostic or therapeutic recommendations.

The TBS score can assist the health care professional in assessment of fracture risk and in monitoring the effect of treatments on patients across time.

This data provides information independent of BMD value; it is used as a complement to the data obtained from the DXA analysis and the clinical examination.

The TBS is derived from the texture of the DXA image and has been shown to be related to bone microarchitecture and fracture risk.

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**Additional results**

<table>
<thead>
<tr>
<th>Region</th>
<th>TBS</th>
<th>T-Score</th>
<th>Z-Score</th>
</tr>
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<tbody>
<tr>
<td>L4</td>
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<td>0.6</td>
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<td>L3</td>
<td>1.571</td>
<td>1.1</td>
<td>3.5</td>
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<tr>
<td>L2</td>
<td>1.543</td>
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<tr>
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<tr>
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<td>L4-L3</td>
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<td>2.3</td>
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</table>

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**Gender / Ethnicity:**

- Female / White: 165.1 cm / 84.8 kg  
  - Date of birth: 01/01/1938  
  - 78.6 years  
  - Swiss, Mrs

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**Comments**

**FRAX** web site: https://www.shef.ac.uk/FRAX/?lang=en
TBS iNstats is a TBS iNsight feature that allows you to analyze your complete TBS patient database and to generate reports on patient distributions. It automatically generates patients’ lists for the selected risk categories. TBS iNstats can help focus clinical attention on those patients whose relative risk of fracture is deemed to have changed as a result of a new TBS score. It will help you to report-out patient data to prescribing doctors, showing that, e.g. some of their patients are at risk contrary to what would be expected from BMD alone. This could also enhance the communication with your prescribing doctors and could boost the success of your business. Therefore, TBS iNstats is a valuable add-on to TBS iNsight v3.0 that could improve and facilitate the management of patients who did not benefit from TBS analysis before. It is available as a standard with TBS iNsight software v3.0.

**TBS iNstats Features**

- Intuitive selection of patients’ risk categories
- Comprehensive filters to personalize reports
  - Referring physicians
  - Examination date period
  - Various BMD & TBS risk categories
- Automatic report generation
  - Global analysis of the medical center database
  - Identification of patients from sub-categories of risk based on both BMD and TBS thresholds
  - Possibility to filter (e.g. referring physicians, date)
  - Corresponding patients’ list reports (patient information; BMD, TBS, FRAX Adjusted for TBS)
- Patients’ report export in pdf and csv (excel compatible) format
- Report customization: medical center logo and header

**TBS iNstats facilitates the integration of TBS into the overall bone fracture risk assessment.**

**EASILY** identify patients at high risk of fracture based on BMD, TBS & FRAX adjusted for TBS

**OPTIMIZE** your patient monitoring & outcomes

**PROMOTE** your best-in-class DXA practice with TBS in line with ISCD & ESCEO recommendations

**ENHANCE** communication with your prescribing doctors