Complete Planning Solution for Hip Procedures

- Primary Total Hip Arthroplasty
- Femoral Resurfacing
- Hemiarthroplasty
- Complex Primary Total Hip
- Hip Revision

Materialise OrthoView
Quick and easy digital pre-operative planning for hip procedures:

- Identify prosthesis size, offset, neck cut and cup inclination with just a few mouse clicks
- Compare and contrast alternative solutions within the same plan
- Move seamlessly to zoomed view for more precise template positioning
- Plan a Total Hip Arthroplasty in less than 60 seconds with SmartHip
- Save plan to PACS, save locally or print
Templating Total Hip Revisions and Complex Primaries

Revision arthroplasty procedures can be modelled on screen in Materialise OrthoView as a connected whole. Entire assemblies are provided in template form, displaying the main components including stem options, collars, and neck assemblies. A database built into the templates ensures only compatible components can be combined on screen.

Femoral Resurfacing

Materialise OrthoView includes a special wizard for resurfacing planning that allows assessment of head size and neck angle and guides the surgeon to the correct drill approach position.

Hemiarthroplasty

Hemiarthroplasty is supported in planning with several templating options:
- Stems with anatomical heads
- Stems with bipolar cups
- Monoblock stems
Primary Total Hip Arthroplasty

The pre-operative assessment of leg length difference and offset, and predicting the surgical outcome, are facilitated with Materialise OrthoView’s patented wizards (automated assistants). Planning with Materialise OrthoView is particularly valuable in complex cases and made quicker and easier by using the SmartHip wizard in conjunction with Materialise OrthoView’s Smart Templates.

SmartHip

The SmartHip planning wizard streamlines and speeds up templating, which can be achieved in under 60 seconds for a simple THA. Femoral canal detection, template sizing and initial positioning are all automatic and a readout of predicted changes to leg length and offset aid the user to choose the implant options that offer the optimal outcome for the patient. On screen reduction with a single mouse click is an option to aid visualization of the plan.

Smart Templates

Materialise OrthoView digital prosthesis templates are grouped according to size and other characteristics into logical ‘families’ for ease of selection. Comparing alternative template choices is easy as each new template appears on the screen in the same position. Materialise OrthoView’s Smart Templates permit only viable, real-world component matches, and size adjustments in one image are replicated in all projections.

The Materialise OrthoView online template library provides an extensive range of digital prosthesis template groups for total hip (replacement and revision) and femoral resurfacing procedures, from over 60 manufacturers.
Materialise OrthoView planning wizards are automated assistants, designed to make pre-operative planning quicker and easier. They reflect real world surgical techniques for each specific procedure.

For example, the hip planning wizards in Materialise OrthoView allow the surgeon to measure:

- Pre-op leg length difference and planned post-op correction
- Pre-op femoral offset and any planned changes
- Femoral neck angle
- Position of femoral neck resection line
- Position of drill insertion point for femoral resurfacing

In addition to the planning wizards, there is a wide range of independent drawing tools, line meters and measuring tools provided in the software.

Materialise OrthoView planning wizards provide instant updates to these and other measurements, as adjustments are made.

SmartZoom

SmartZoom incorporates two elements designed to make assessment of the anatomy, positioning templates and identifying specific measurements even easier and quicker.

Blue Lens provides an instant, precision close-up of the area of interest, which can be adjusted for magnification and moved around the screen as required.

MiniView can be activated at any stage of the planning process. It is useful as a reference when zooming into a specific section of the main image.
At a glance:
The Benefits of Materialise OrthoView for Planning Hip Procedures

“I rely on Materialise OrthoView to help me deal with the unexpected. Not only can I choose the appropriate size of implant for the patient, I can also determine in advance whether a standard or offset prosthesis, or even a modular prosthesis, is required. I can also trial different implant vendors and identify where to put the neck cut.”

Dr Chris Pelt, Assistant Professor,
Department of Orthopaedic Surgery at the University of Utah

One-click image scaling
Instantly corrects for image magnification when sizing templates and calculating measurements.

Intuitive wizards and specialist tools
The specialist wizards (automated assistants) within Materialise OrthoView facilitate planning for total hip arthroplasty, femoral resurfacing, and hemiarthroplasty. The wizards enable quick and easy planning on-screen with minimal mouse clicks.

Managing leg length difference and offset
Materialise OrthoView’s SmartHip wizard and Smart Templates make it easy to see the effect that the choice of template position, size, neck angle, etc. will have on these crucial measurements.

SmartHelp
A click-on-click-off integral panel providing a tracking contextual guide, index and links to reminders and tips for each step of the planning process.

Comprehensive digital template library
Includes high quality, intuitive, multipart hip templates that lock together to move as one. Materialise OrthoView’s Smart Templates are designed to permit only viable, real-world component matches.

Save plan to PACS, print or save locally
The result of the Materialise OrthoView planning session is a comprehensive plan and report that can be saved to PACS and retrieved for reworking or for reference during surgery. Local saving or printing of the plan are also supported.