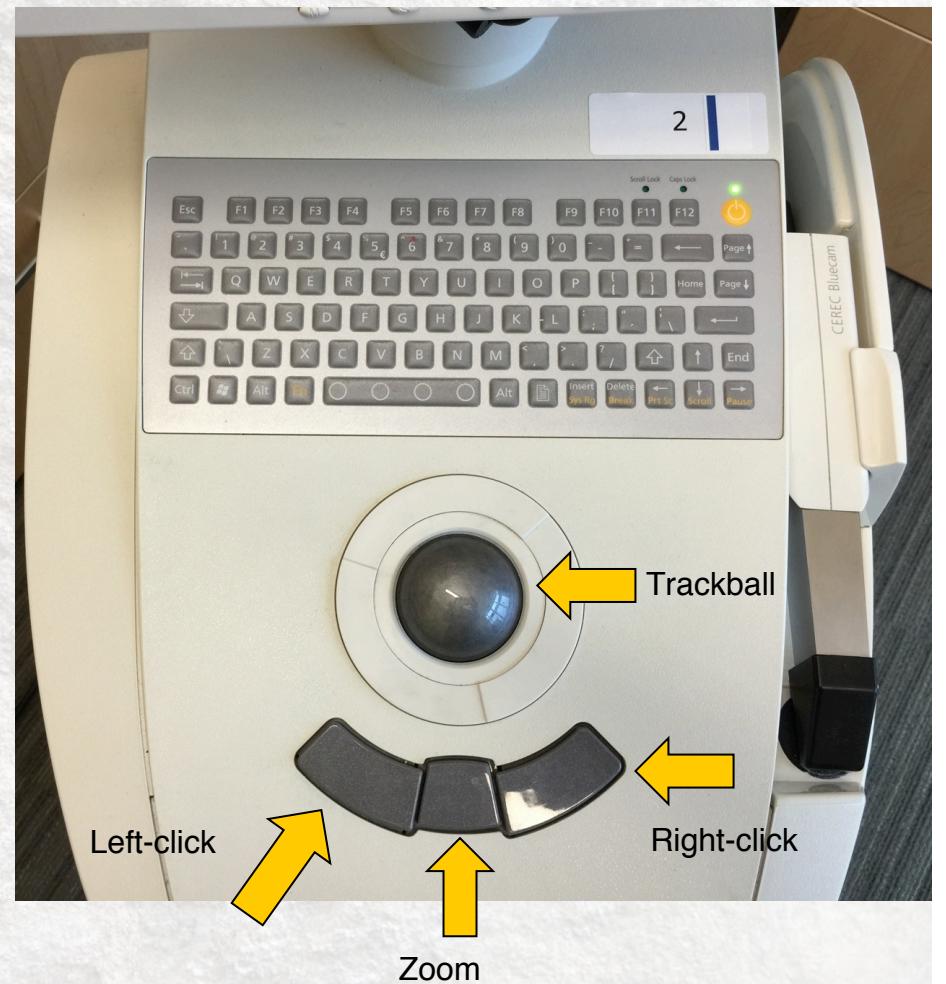


CADCAM: Intro to CEREC Software & Digital Imaging



Trackball & Keyboard

- The trackball functions like a standard mouse
- Model movement on monitor:
 - Left-click, hold > move trackball
 - rotate model around single point
 - Right-click, hold > move trackball
 - move model laterally
 - Middle-click, hold > move trackball
 - zoom



5 Phases to complete a restoration



- Administration > patient and restoration info
 - Acquisition > image capture to catalogues
 - Model > calculation of models
 - Design > edit proposal
 - Mill > fabricate restoration
-
- Each phase consists of several steps before proceeding
 - Once a phase is completed, it can be revisited at any time

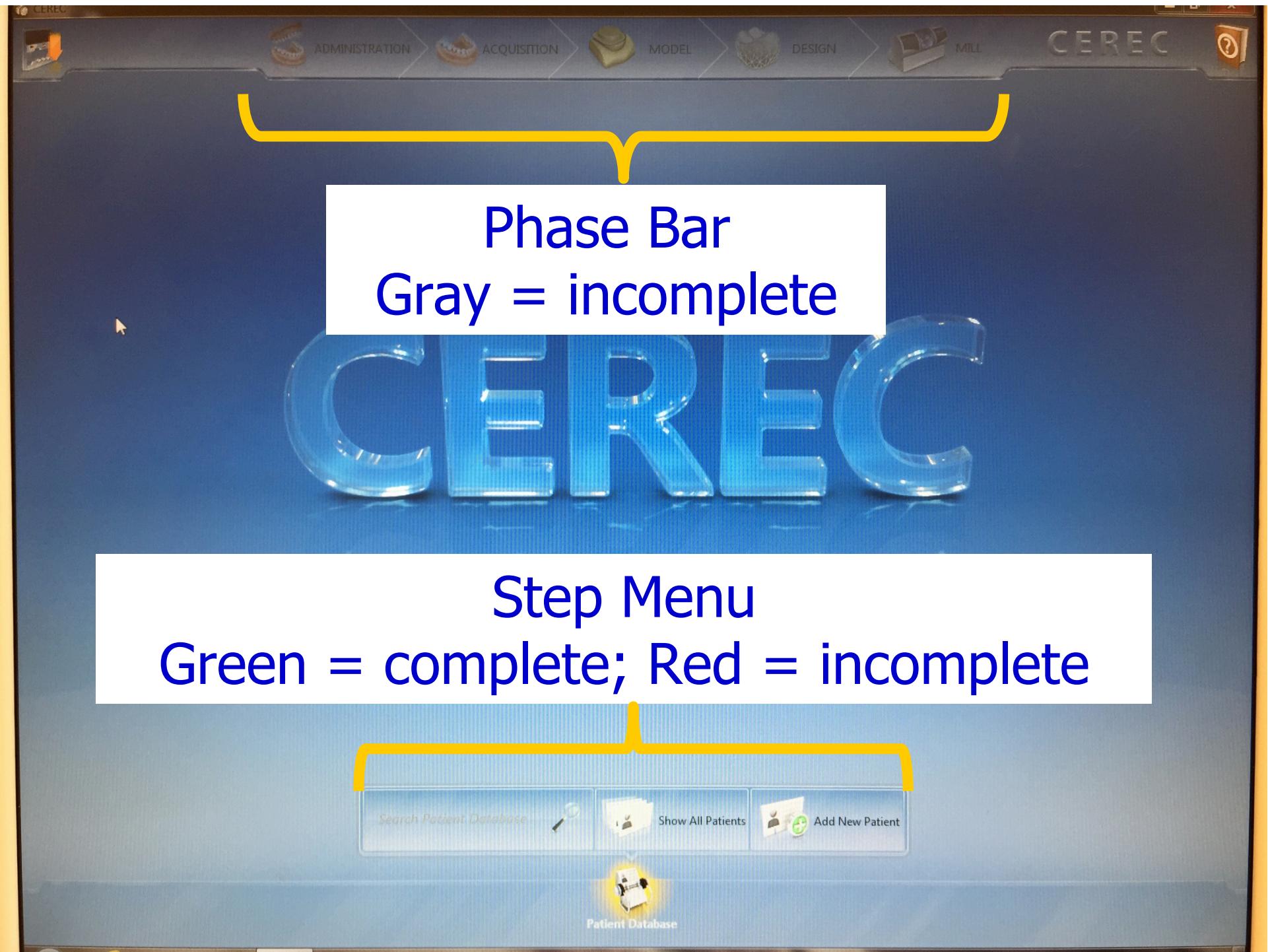
CEREC 4.4 Start Screen

CEREC

Search Patient Database Show All Patients Add New Patient



Patient Database



CEREC Training



ADMINISTRATION



ACQUISITION



MODEL



DESIGN



MILL

CEREC



Phase Bar
phases complete

Step Menu



12



13



14

Dock Bar



View
Options



Tools



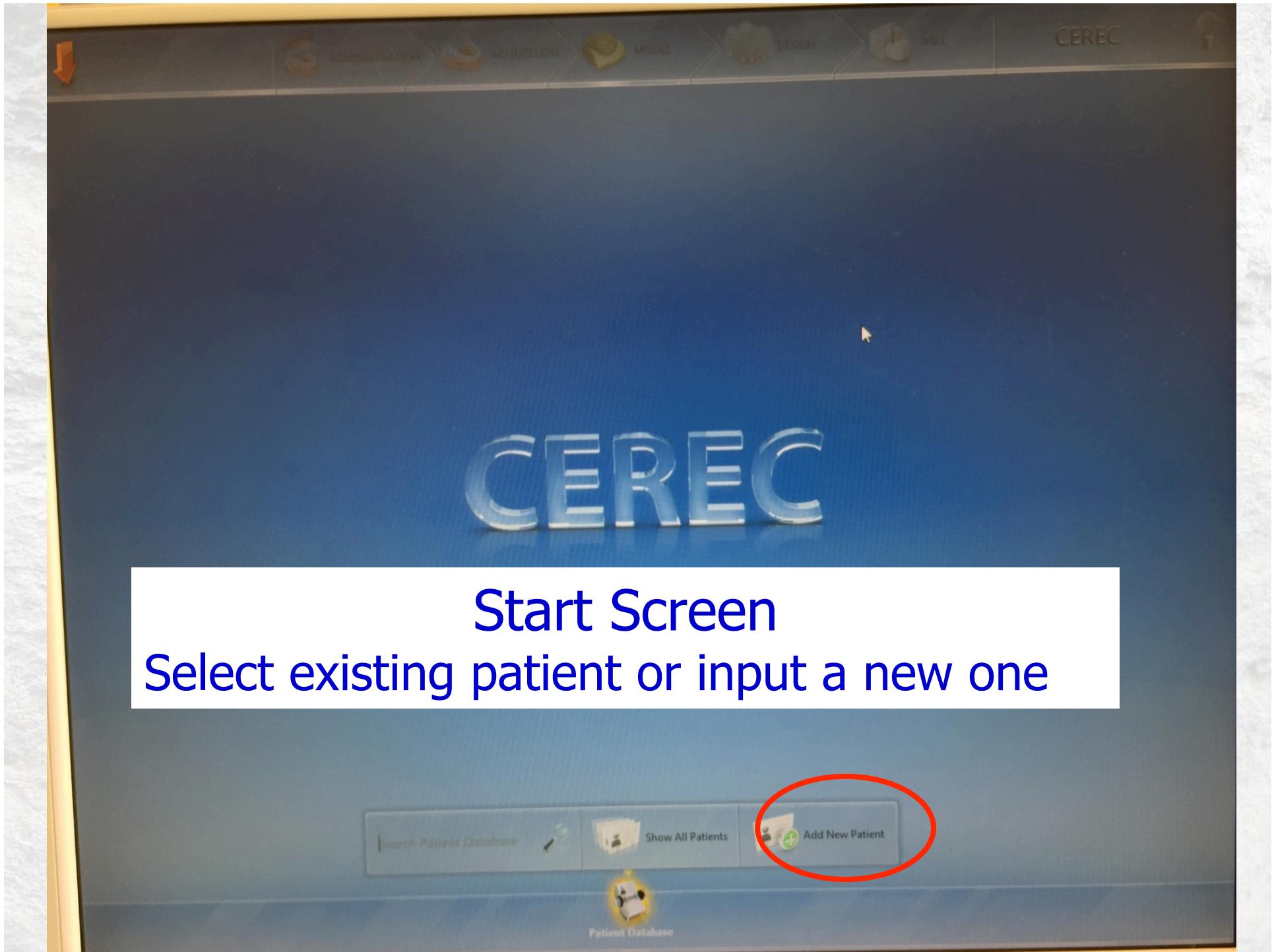
Display
Objects



Analyzing
Tools

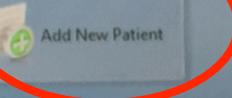


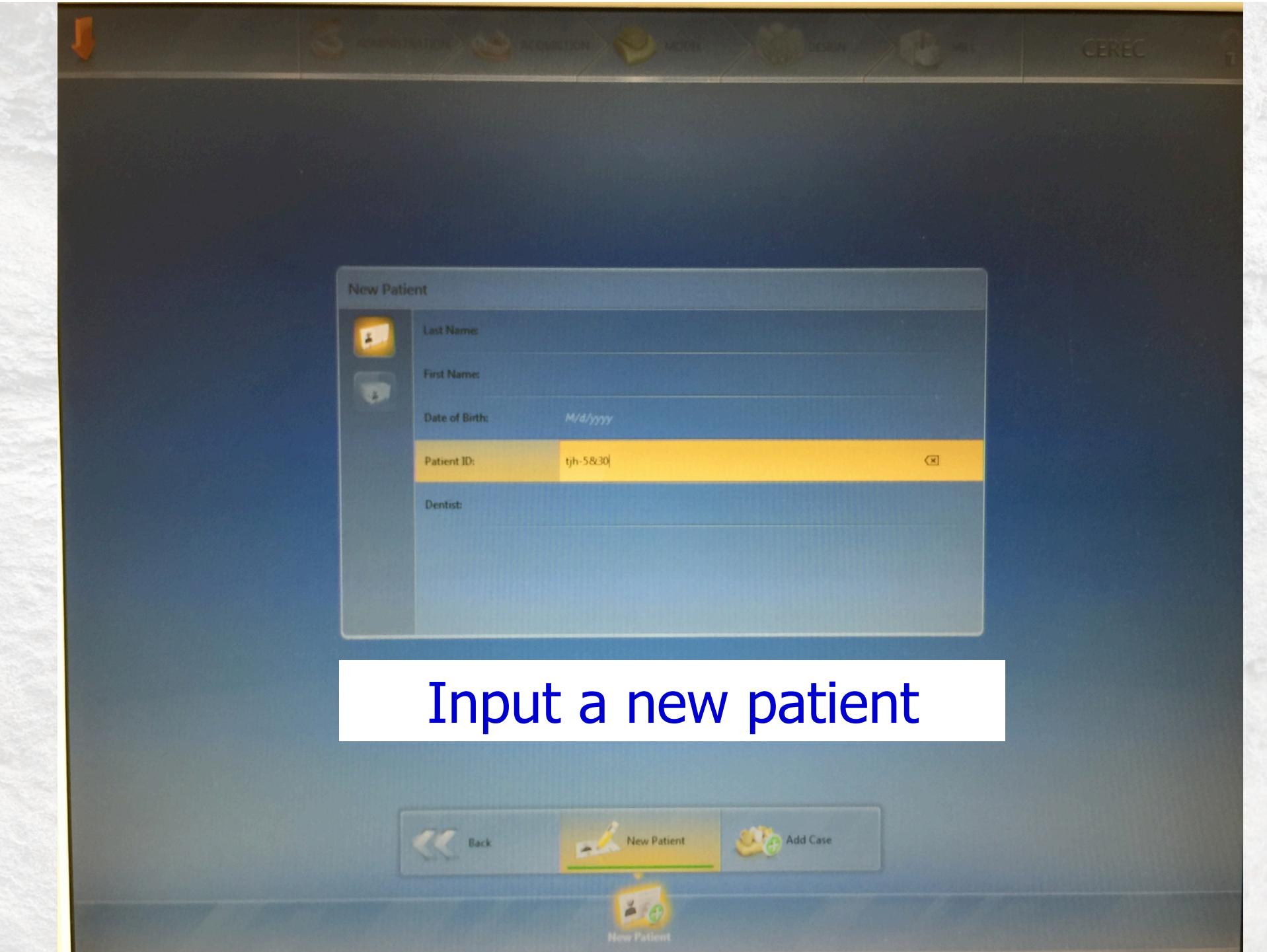
Link
Options



Start Screen

Select existing patient or input a new one







tjh-5&30



ADMINISTRATION



ACQUISITION



MODEL



DESIGN



MILL

CEREC



Select restoration(s)

Indications



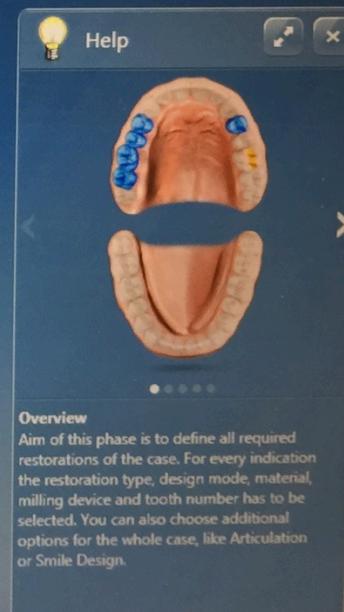
Single Restoration

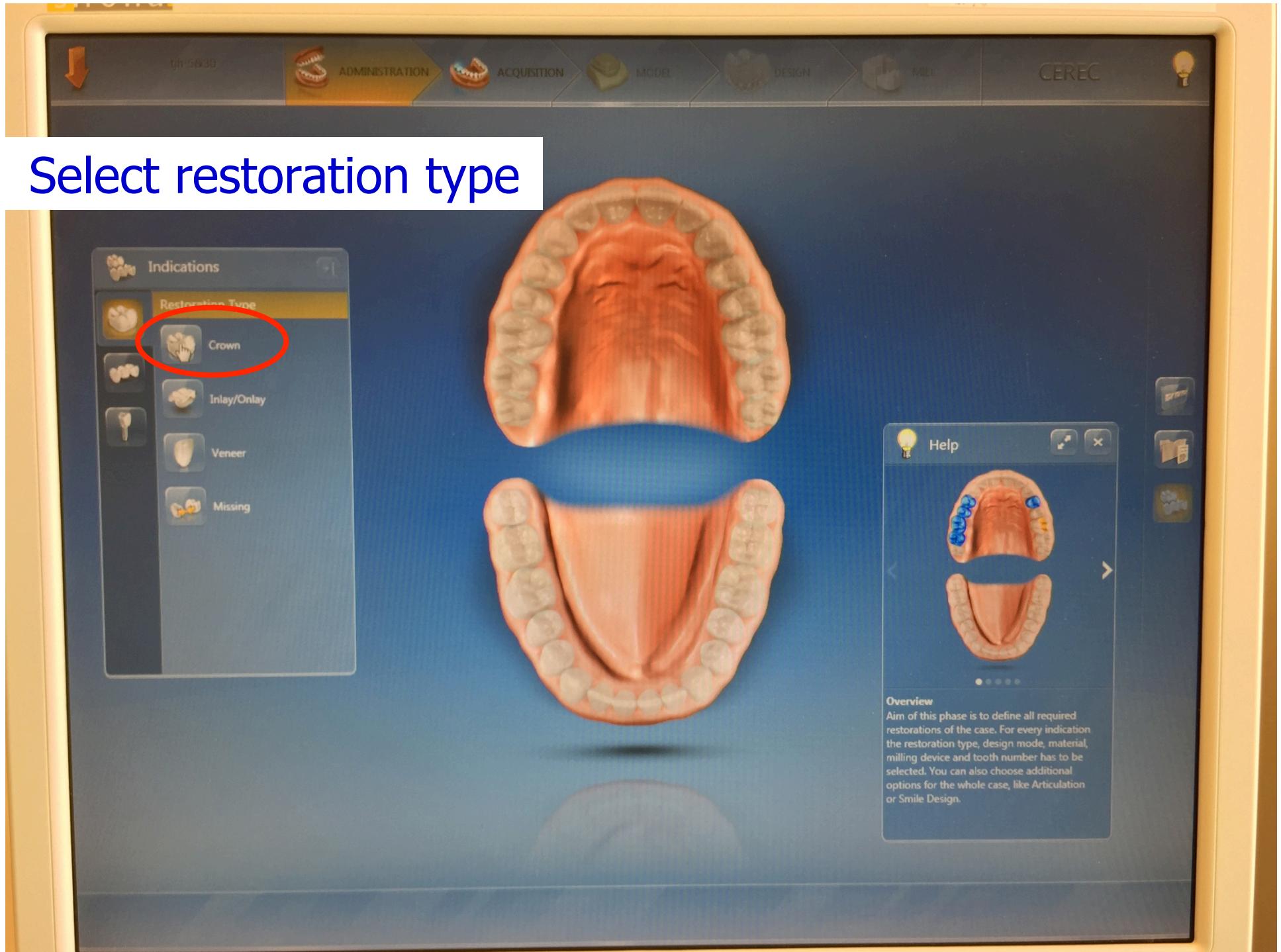


Bridge Restoration



Abutment





Select restoration type

tjh-5830



ADMINISTRATION



ACQUISITION



MODEL



DESIGN

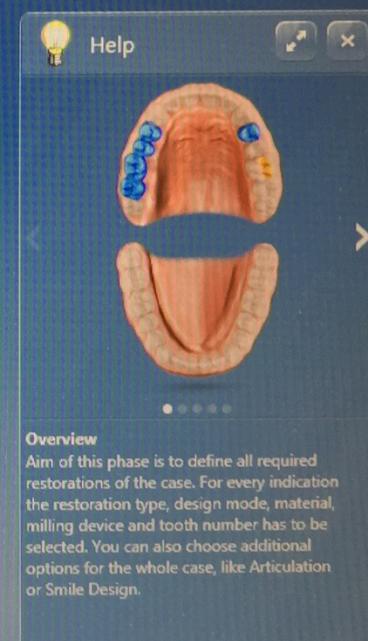
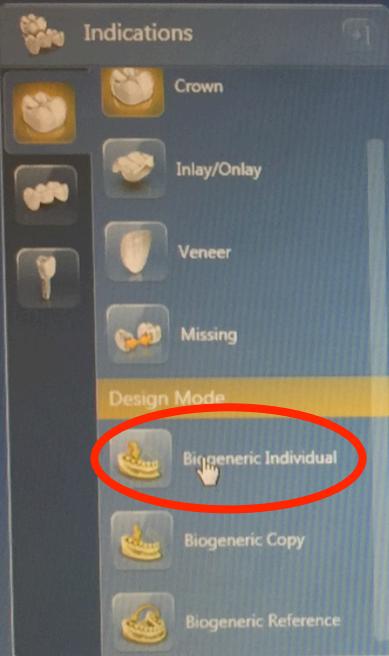


MILL

CEREC



Select design mode



Design Mode

- Biogeneric Individual
 - Maximum control of the restoration
 - Contour and anatomy calculated from adjacent and opposing teeth
- Biogeneric Copy
 - Copy of pre-treatment condition of the same tooth that is prepared
 - Useful to maintain existing contour or occlusal anatomy
- Biogeneric Reference
 - Copy of any similar tooth; contralateral or other dentition model
 - Minimal usefulness for posterior restorations



1. Select



ADMINISTRATION



ACQUISITION



MODEL



DESIGN



MILL

CEREC



Select material: manufacturer

Indications

Restoration Type

- Crown
- Inlay/Onlay
- Veneer
- Missing

Design Mode

Biogeneric Individual

Material

Select Manufacturer...

Select Manufacturer...

- SIRONA
- IVOCLEAR VIVADENT
- DENTSPLY
- Merz
- 3M ESPE
- GC

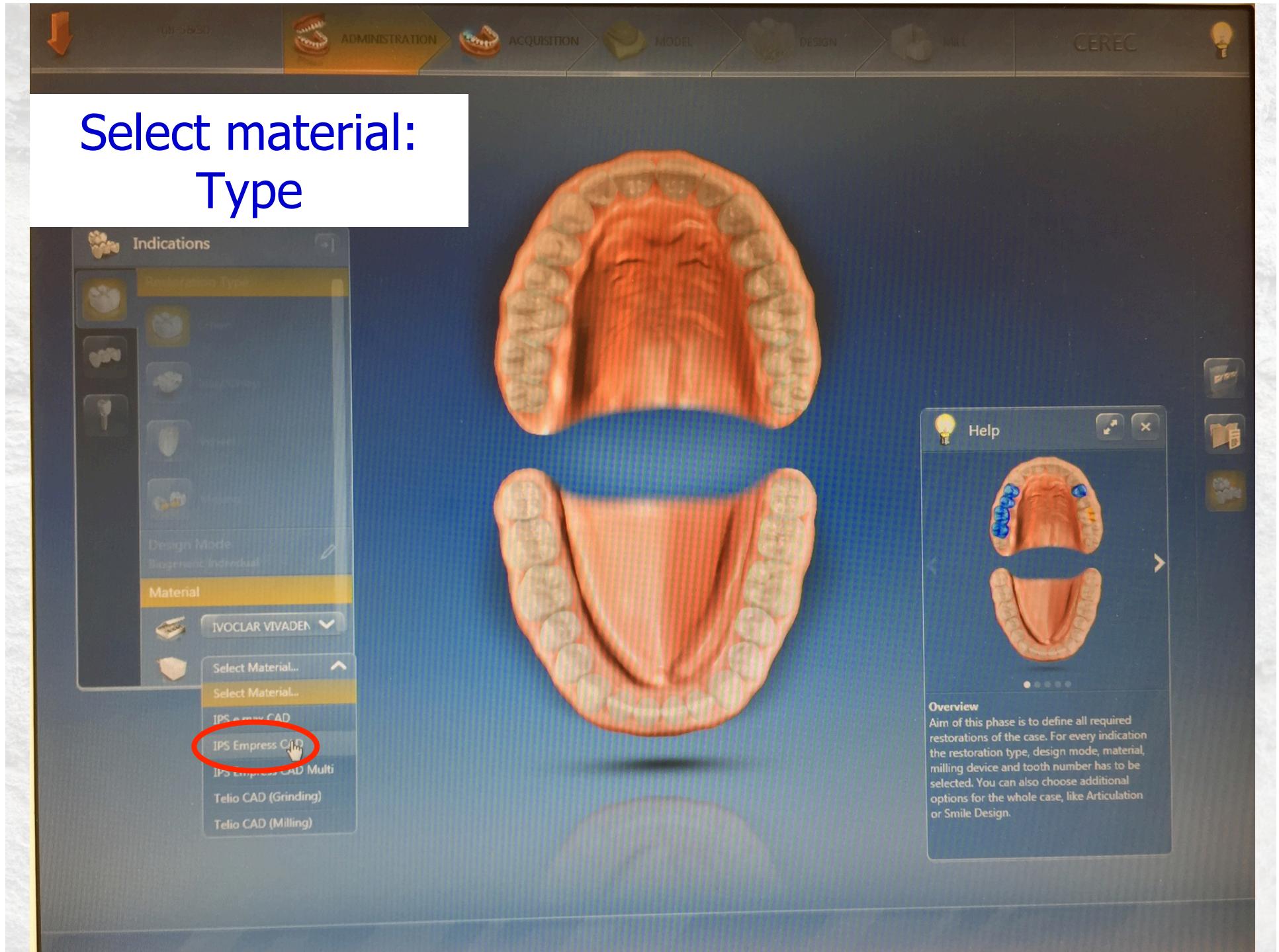


Help

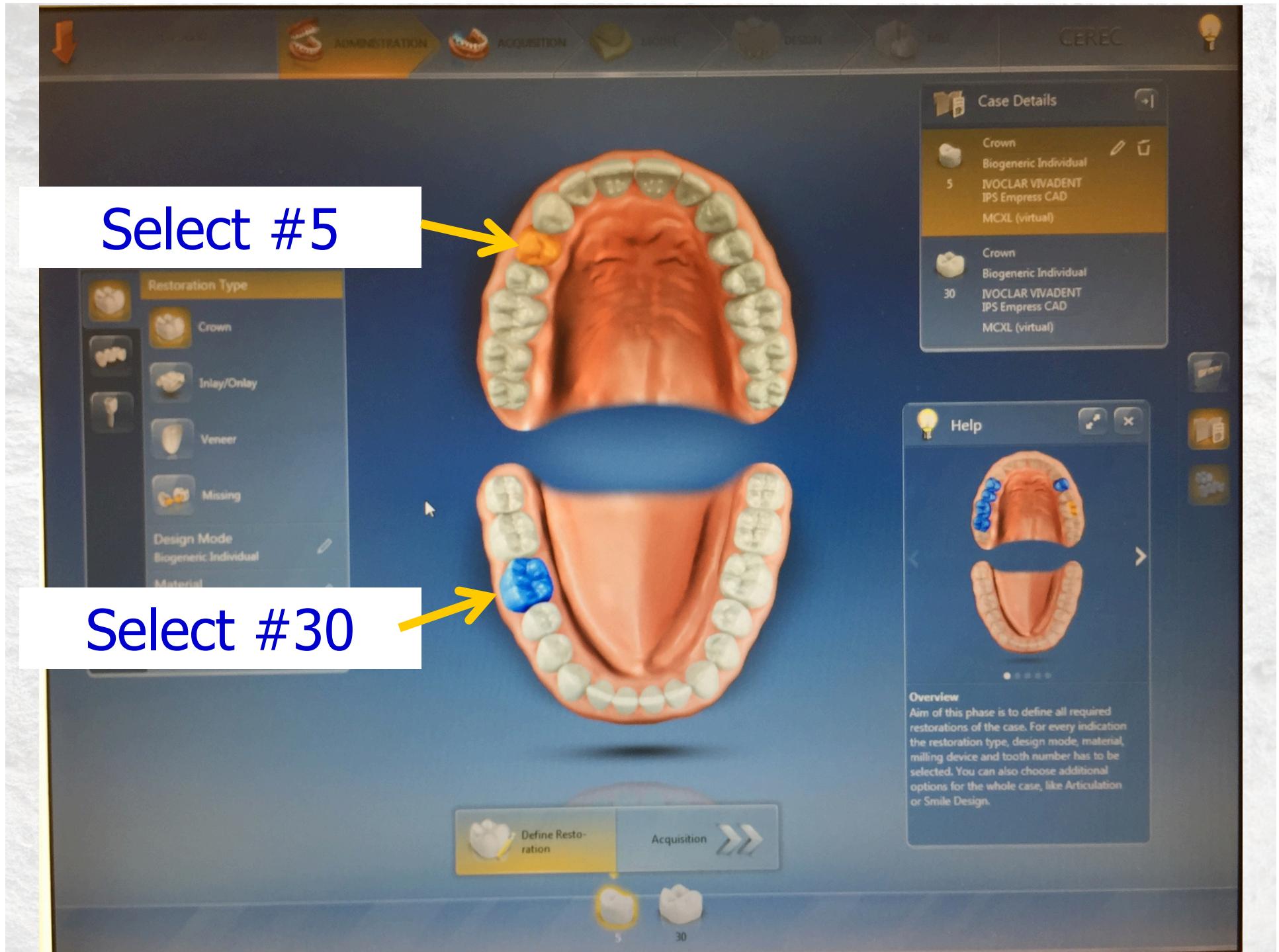
Overview

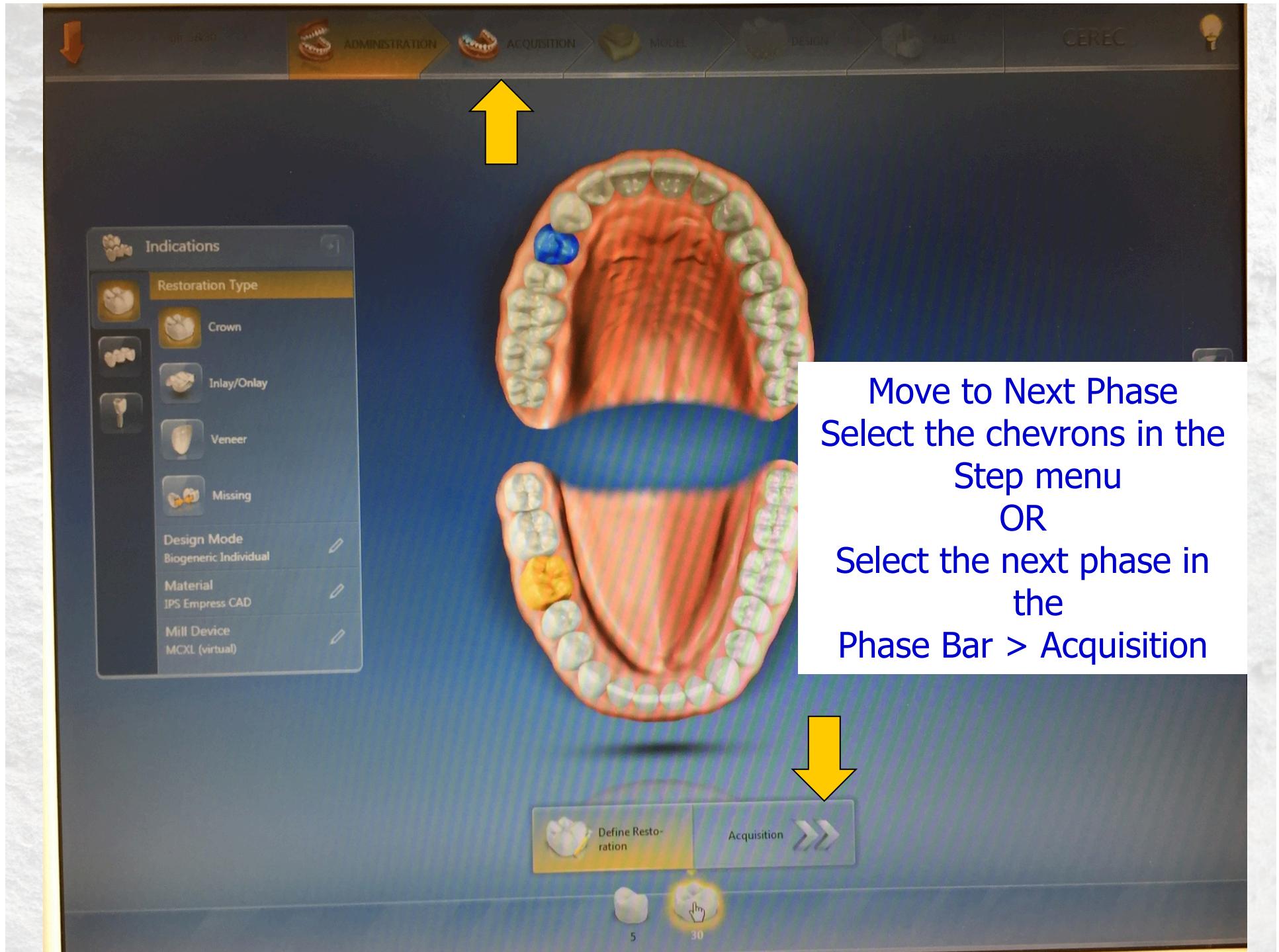
Aim of this phase is to define all required restorations of the case. For every indication the restoration type, design mode, material, milling device and tooth number has to be selected. You can also choose additional options for the whole case, like Articulation or Smile Design.



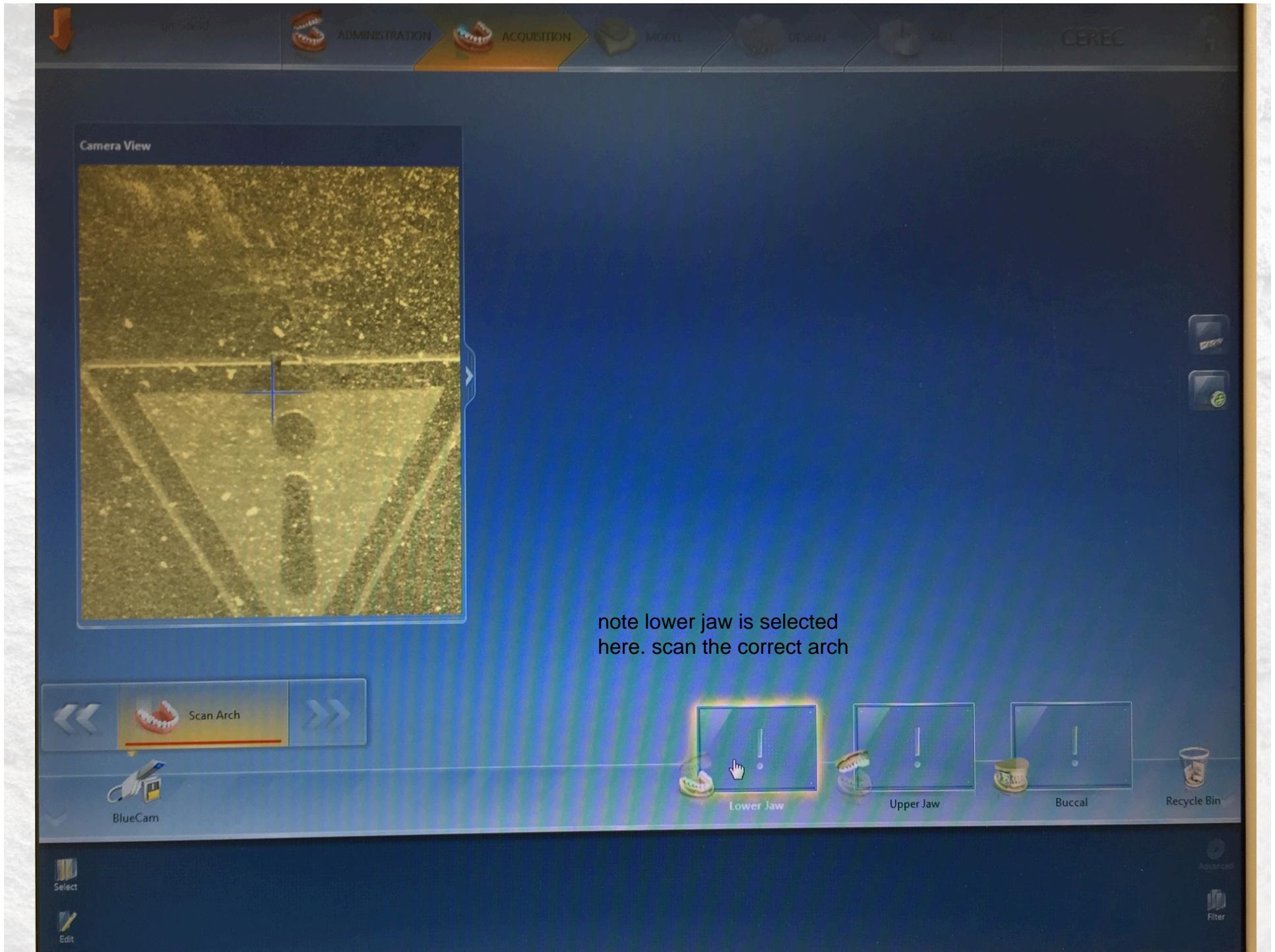


Select material: Type



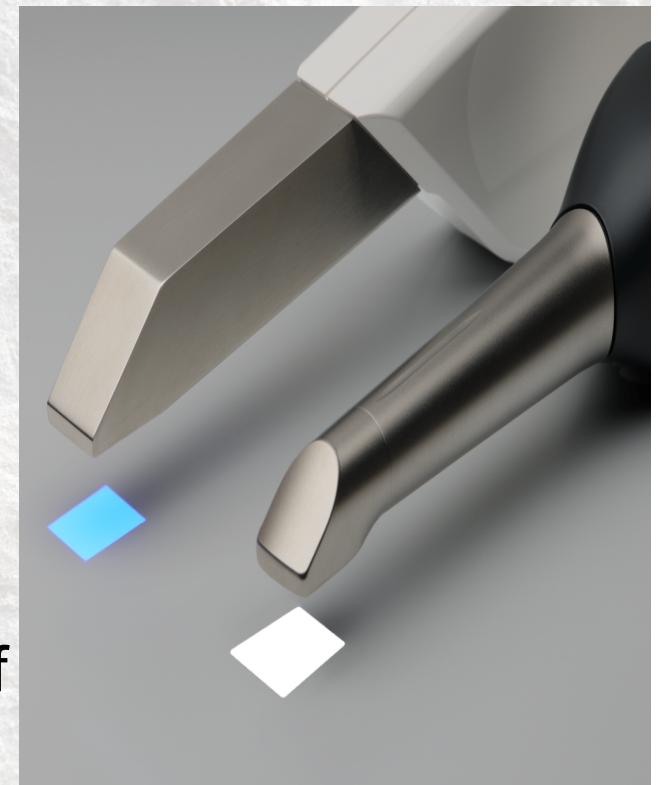


Move to Next Phase
Select the chevrons in the
Step menu
OR
Select the next phase in
the
Phase Bar > Acquisition



Camera Types

- BlueCam > Single Image Camera
 - Capture multiple single images
 - Images are combined by the software to create a virtual model
 - Must use multiple camera angles
 - Focal distance is 25 mm
- OmniCam > Video Camera
 - Live color streaming
 - Focal distance is 15 mm
 - 42% smaller camera; same size field of view
 - Scratch resistant sapphire lens



CEREC OmniCam

- Camera rests in a heated holder to avoid fogging
- Clean lens - smudges may lead to phantom data
- Use a pen grasp and finger rest for max control
 - Head angle similar to highspeed handpiece
- Avoid extraneous items in the picture
 - No cotton rolls, fingers, wedges
- Video recording
 - Must keep camera moving
 - Start & end on occlusal

