

Create A Normals Database



4DM Version:
2017 and later releases

The user-defined normals database must have a minimum of 20 patients added before it is available for use.



INVIA recommends a normals database population of 60 patients due to the wide range of normal variability between patient datasets.



To activate the **DB Generator** screen, go to the **Screen Layout** section of **Preferences** in 4DM. Navigate to the **Inactive Screens** list, select the screen name from the list, and click **Activate Screen**.



The **Composite** option listed in the **Database Gender** drop-down menu should only be used when creating a normals database for Attenuation Corrected (AC) datasets.



Verify that both the new **Database Filename** and **Description** are unique by cross-checking them against the **List of Database Files on System** that is provided at the bottom of the window (Figure 2).

The accuracy of user-defined normals databases depends on the quality of patient selection, image acquisition and image reconstruction. For insight, refer to INVIA's **Qualifying Patients for a Normals Database** Reference Guide.

HOW-TO GUIDE

1. Launch 4DM using a qualified patient by selecting the raw datasets and properly reconstructed transverse or SA datasets.
2. Select the **DB Generator** screen from the **Screen Selector Panel** (see 1 in Figure 1). See side-panel for instructions how to activate this screen.
3. Select the **Create a Normals Database** icon (see 2 in Figure 1) for the dataset you wish to use to create the new normals database.

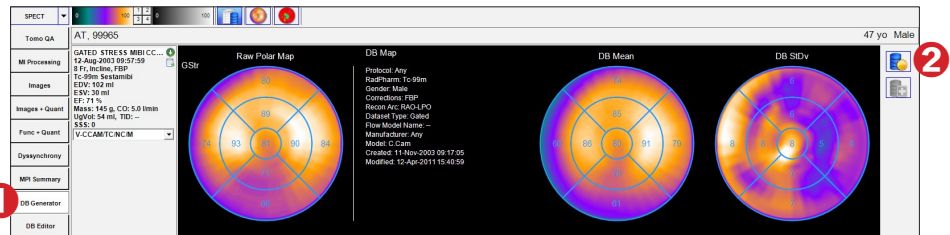


Figure 1: DB Generator screen

4. Within the **Create New Database** window (Figure 2), select the appropriate **Acquisition/Processing** options from the following drop-down menus:

- Radiopharmaceutical
- Protocol
- Database Gender
- Database Type*
- Flow Model Name**
- Corrections
- Recon Arc
- Imaging Orientation
- Manufacturer
- Model

* Verify the information displayed is correct.

** Only used for dynamic datasets.

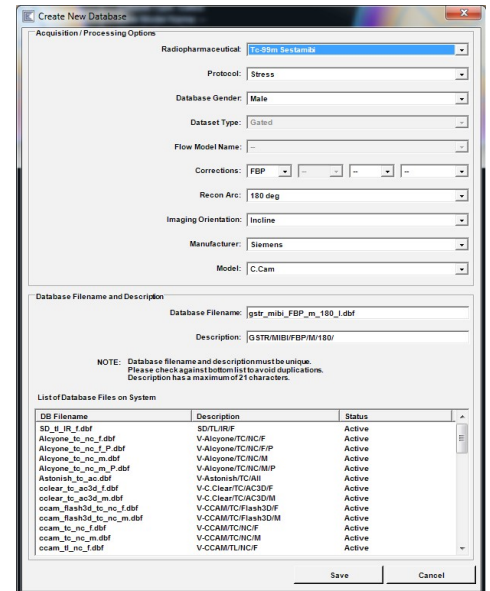


Figure 2: Create New Database Window

5. The application automatically generates a **Database Filename** and **Description**, which is a concatenation of the acquisition and processing parameters, as limited by the 21 character maximum.

Changing the **Description** to a name readily identifiable by all users should be done at this time. The program uses the **Description** when listing the databases that users need to select from. The **Filename** can remain as generated, to function as an audit trail for the acquisition and processing parameters selected during the "create database" procedure.

6. Select the **Save** button. A window displays verifying the new database was successfully saved. Click **OK**. The database is ready to have patients added to it. Refer to INVIA's **Add Patients to a Normals Database** quick reference guide for details about adding datasets.