**Medtech32 Creatinine Clearance Calculator**

In Medtech32 the Medical Calculator allows you to calculate patients Creatinine Clearance. *(The Creatinine Clearance Calculator has been available in Medtech32 since November 2004).*

The below guide has been provided to ensure this is setup correctly in Medtech32:

**Overview of Creatinine Clearance Equations**

There are a number of equations that are used to estimate kidney function. The most used equations are the Cockcroft and Gault (Creatinine Clearance) and the MDRD (Glomerular Filtration Rate).

Medtech32 uses Cockcroft and Gault to calculate Creatinine Clearance, however there are different forms of the Cockroft and Gault equations using different values for weight eg: kgs/lbs etc, therefore each form of Cockroft and Gault equation will give a different calculation of Creatinine Clearance.

The calculation equations in Medtech32 have been clinically checked and verified for accuracy.

In Medtech32 any discrepancies in the calculation will be related to the measurement unit used by your lab to send through Serum Creatinine results i.e. do you receive these in umol/l, mmol/l or mg/dl. The Creatinine Clearance Calculator in Medtech32 requires mmol/l.

To ensure you get an accurate result from your Creatinine Clearance Calculator you must ensure that it is setup correctly in Medtech32. The following explains how to do this:

**Screening Term Setup**

*Setup ➤ Recall/Screening ➤ Screening Term*

1. Confirm you have a Serum Creatinine Screening Term setup with the exact measurement unit as provided by your lab. If not please add one as demonstrated below.
2. To confirm your lab measurement unit please refer to a patient's lab result.

Confirm your Medical Calculator Mappings are correct

Setup ► Recall/Screening ► Medical Calculator

**Important Note:** The Screening Term mapped in the Calculator Mapping screen MUST BE your Serum Creatinine Screening Term (CRE) not the Creatinine Clearance (CRECLR) Screening Term.
Inbox Screening Mappings

Setup ► In/Outbox ► Inbox Screening

To ensure your lab data maps into your Screening Terms, please confirm this is accurately mapped.

Run the Serum Creatinine Conversion Utility if required

Utilities ► Miscellaneous ► Serum Creatinine mgdl to mmol
Or
Utilities ► Miscellaneous ► Serum Creatinine umol to mmol

The Creatinine Clearance Calculator in Medtech32 requires mmol/l measurement units to accurately calculate Creatinine Clearance. Therefore if you are receiving results in any other format i.e. umol/L you will need to run the relevant Serum Creatinine Conversion utility.

Before running this utility, please ensure you have confirmed the measurement units your lab is sending. Please also read the explanatory screens carefully before running the conversion utility – if in any doubt please ensure that you have a successful Medtech32 backup before you run the utility.
1. If you are receiving Serum Creatinine lab results with the measurement unit of mg/dl, please run the Serum Creatinine mg/dl to mmol utility.

2. If you are receiving Serum Creatinine lab results with the measurement unit of umol/L please run the Serum Creatinine umol to mmol utility.

The two utilities will convert ALL entries with a Serum Creatinine Screening Term (CRE)

Once the above is completed you are now ready to use the Medical Calculator to calculate a Patients Creatinine Clearance.

**Using the Medical Calculator in Medtech32**

*Module ➤ Recall/Screening ➤ Medical Calculator* Or use the Medical Calculator icon
The following fields will pre populate. If the data has not pre populated, please enter the required information

- Age and Gender will pre populate from the Patient Register screen
- Height and Weight will pre populate from Patients Screening entries if available.
- Serum Creatinine mmol/L will pre populate from your Serum Creatinine Screening Term
- If the data has not pre populated, please enter the required information

Once you click on save the information will write back to patient screening, allowing you to chart and graph as required.

For further information on this feature, or any other query, please contact Medtech Support on 0800 2 MEDTECH (633 832) - Option 1 or send us a fax, toll free on 0800 MEDTECH (633 832) or email: support@medtechglobal.com.