

The logo for GVK BIO, featuring the letters 'GVK' in black and 'BIO' in red, with a red arrowhead pointing upwards and to the right above the 'K'.

Accelerating Research

A photograph of a modern, multi-story office building with a facade of white and blue panels and large windows. The building is set against a blue sky with scattered white clouds. A white wall in the foreground has the GVK BIO logo on it.

GOBIOM Case Studies

GVK BIO Online Biomarker Database

www.gobiomdb.com

Case Study 4: Under which intervention creatinine levels increases more in HIV patients?

Creatinine - Nephrotoxicity

- Measuring creatinine levels is a useful method of evaluating renal dysfunction
- In any given condition, if a user is interested in analyzing drug-induced nephrotoxicity by measuring creatinine levels, GOBIOM can be useful as it has data from all the reported clinical studies under different drug interventions in various study population groups.
- The analysis tool allows user to filter the data by drug, disease and biomarker to easily assess the best therapy available with least nephrotoxicity for a given condition.

Under which intervention creatinine levels increases more in HIV patients?

Select urinary system disorders in organ disorder field present in the Safety/Toxicity section

Select Creatinine in the biomarker name field

Advanced Search

[» Summary](#) [» Advanced Search](#)

Biomarker Clinical Status	Reference Clinical Status
<input checked="" type="checkbox"/> Evaluated Clinical	<input checked="" type="checkbox"/> Clinical
<input checked="" type="checkbox"/> Exploratory Clinical	<input checked="" type="checkbox"/> PreClinical
<input checked="" type="checkbox"/> PreClinical	

Search Type: Contains Starts with

Biomarker

Biomarker Name ?

Biomarker Pathways ?

Nature ?

Biomarker Nature Type ?

Application ?

FDA Qualification ?

Therapeutic Area

Therapeutic Area ?

Indication ?

Associated With ?

Disease Stage ?

Disease Grade ?

Safety / Toxicity

Organ Disorder ?

Organ Disorder Sub Type ?

Select single creatinine record and click on integrated view

- The GOBIOM Integrated View allows the user to quickly scan all the relevant biomarker information in one data-intensive window. This provides a simple and quick method of comparing different tables available.

The screenshot displays the GOBIOM Online Biomarker Database interface. At the top, the logo 'GOBIOM' is visible with the tagline 'GVK BIO Online Biomarker Database'. A navigation bar includes links for 'My Account', 'Export', 'Help', 'Summary', 'Search History', 'Search Results', 'Search', and 'Logout'. A welcome message 'Welcome Rama Devi Sanam!' is shown on the left. The main content area is titled 'Search Results' and features tabs for 'Report View', 'Integrated View', 'Alert Colleague', and 'Save query'. Below the tabs, there are breadcrumb links: 'Summary > Advanced Search > Search Results'. A 'Total search records: 1' indicator is present, along with a link to 'Export This Table(Excel)'. A table displays the search results:

<input type="checkbox"/>	BIOMARKER NAME	STATUS	DISEASE NAME	TYPE	FDA	BM CLASS
<input checked="" type="checkbox"/>	CREATININE	Clinical	HIV Infection	Biochemical	No	Safety/Toxicity

On the left side, there is a sidebar with 'Applied Filters' and a list of filter categories: Indication, Biomarker Nature, Application, Drugs, Pathways, Therapeutic Area, Year of Publication, and Biomarker with below data. A 'Filter' button is located at the bottom of this sidebar.

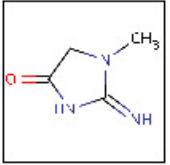
Integrated view of biomarker details page appears.

Click on Integrated view button and select experimental details to view all the data points

Biomarker Details Integrated view ▾

Total number of records: **1**
Sub records number: **1**
Select columns [+](#)

Filter By:

GVKBMID	Biomarker Name	Structure	CAS ID	Biomarker Class	Organ Disorder	Biomarker Type	Chemical
SFT-65	CREATININE	 3D View	60-27-5	Safety/Toxicity	Urinary System Disorders	Biochemical	Metabolite

Clinical Application

GVKBMID	Biomarker Name	Disease Name	ReferenceID	Clinical Trial/Preclinical ID	CT Reference	Application	Application Value
SFT-65	CREATININE	HIV Infection	14547 +	NCT00299091		Safety	
SFT-65	CREATININE	HIV Infection	16332 +	NCT00207948		Safety	
SFT-65	CREATININE	HIV Infection	16737 +			Safety	Yes
SFT-65	CREATININE	HIV Infection	16761 +			Safety	Yes
SFT-65	CREATININE	HIV Infection	16776 +			Safety	Yes

- Biomarker
- Biomarker Details
- Experimental Details**
- Analytical Qualification
- Clinical Qualification
- Biomarker PKPD
- Biomarker Statistics
- Therapeutic Area
- Disease Details
- Disease Description
- Drug
- Drug Structure Details
- Drug Data
- Clinical
- Study Population
- Metadata Clinical
- Patient Characteristics
- PreClinical
- Preclinical Study Details
- Preclinical Statistics
- References
- Reference Details

Apply Comparison filter – “Between after treatment and baseline”

Tag – “Level”

These filters will filter out the datapoints giving creatinine levels after treatment and baseline.

Brief Detail

Filter By: Comparison Between after treatment and baseline

Biomarker Name	Disease Name	GVKBMID	Summary	Reference ID
CREATININE	HIV Infection	SFT-65	Mean Serum Creatinine Levels W More	11076101
CREATININE	HIV Infection	SFT-65	Mean Serum Creatinine Levels W More	11076101
CREATININE	HIV Infection	SFT-65	Mean Serum Creatinine Levels W More	11076101
CREATININE	HIV Infection	SFT-65	Serum Creatinine Levels In HIV More	11076101
CREATININE	HIV Infection	SFT-65	Serum Creatinine Levels >=1.4 More	11076101

Brief Detail

Filter By: Tag Level

Filter Applied

Comparison
:Between after treatment and baseline

Biomarker Name	Disease Name	GVKBMID	Summary	Reference ID
CREATININE	HIV Infection	SFT-65	Mean Serum Creatinine Levels W More	11076101
CREATININE	HIV Infection	SFT-65	Mean Serum Creatinine Levels W More	11076101
CREATININE	HIV Infection	SFT-65	Mean Serum Creatinine Levels W More	11076101
CREATININE	HIV Infection	SFT-65	Serum Creatinine Level Progres More	16011534
CREATININE	HIV Infection	SFT-65	Baseline Serum Creatinine Conc More	19183077
CREATININE	HIV Infection	SFT-65	Baseline Serum Creatinine Conc More	19183077

Under which intervention creatinine levels increases in HIV patients?

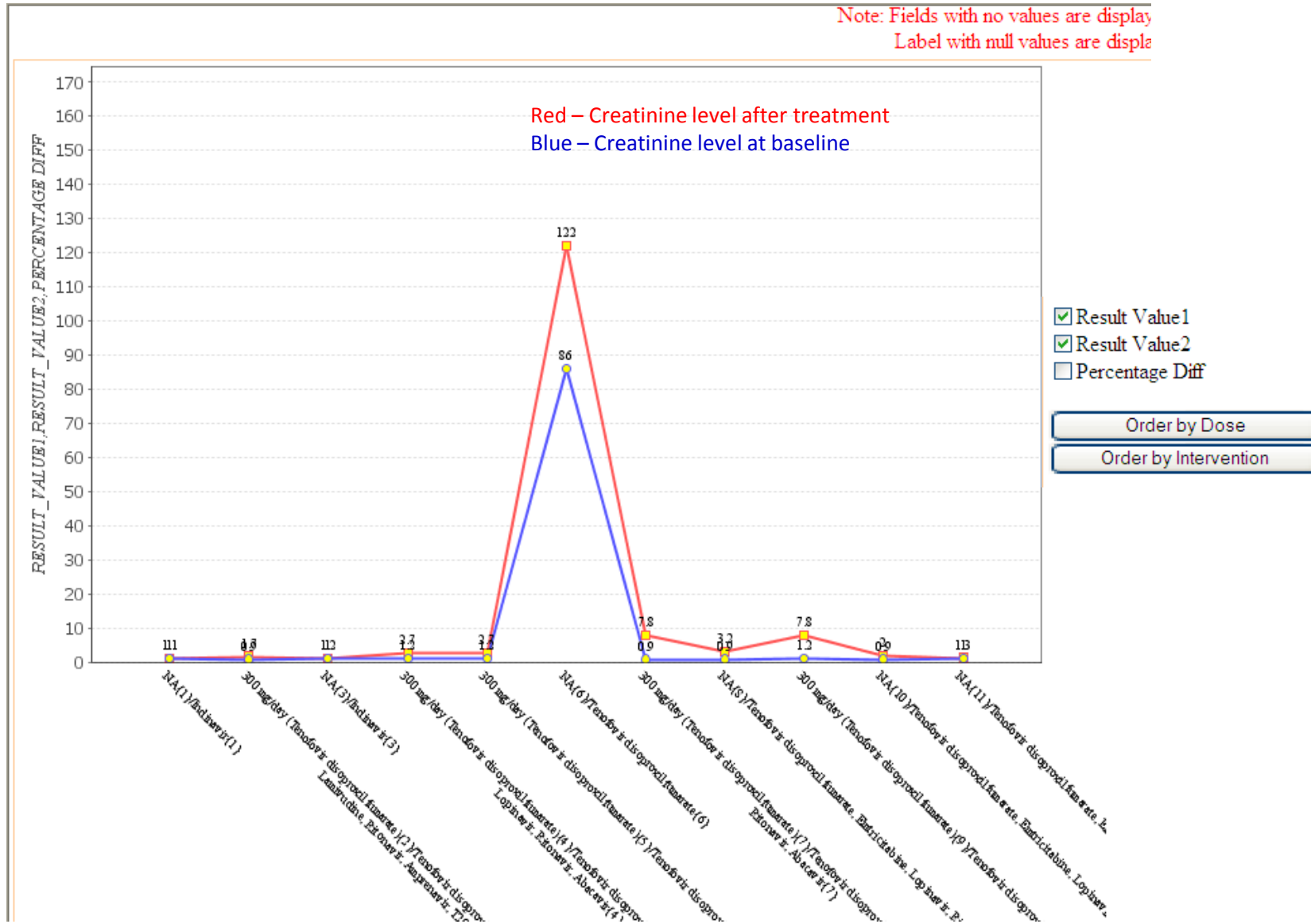
Click on Plotting after applying the required filters.

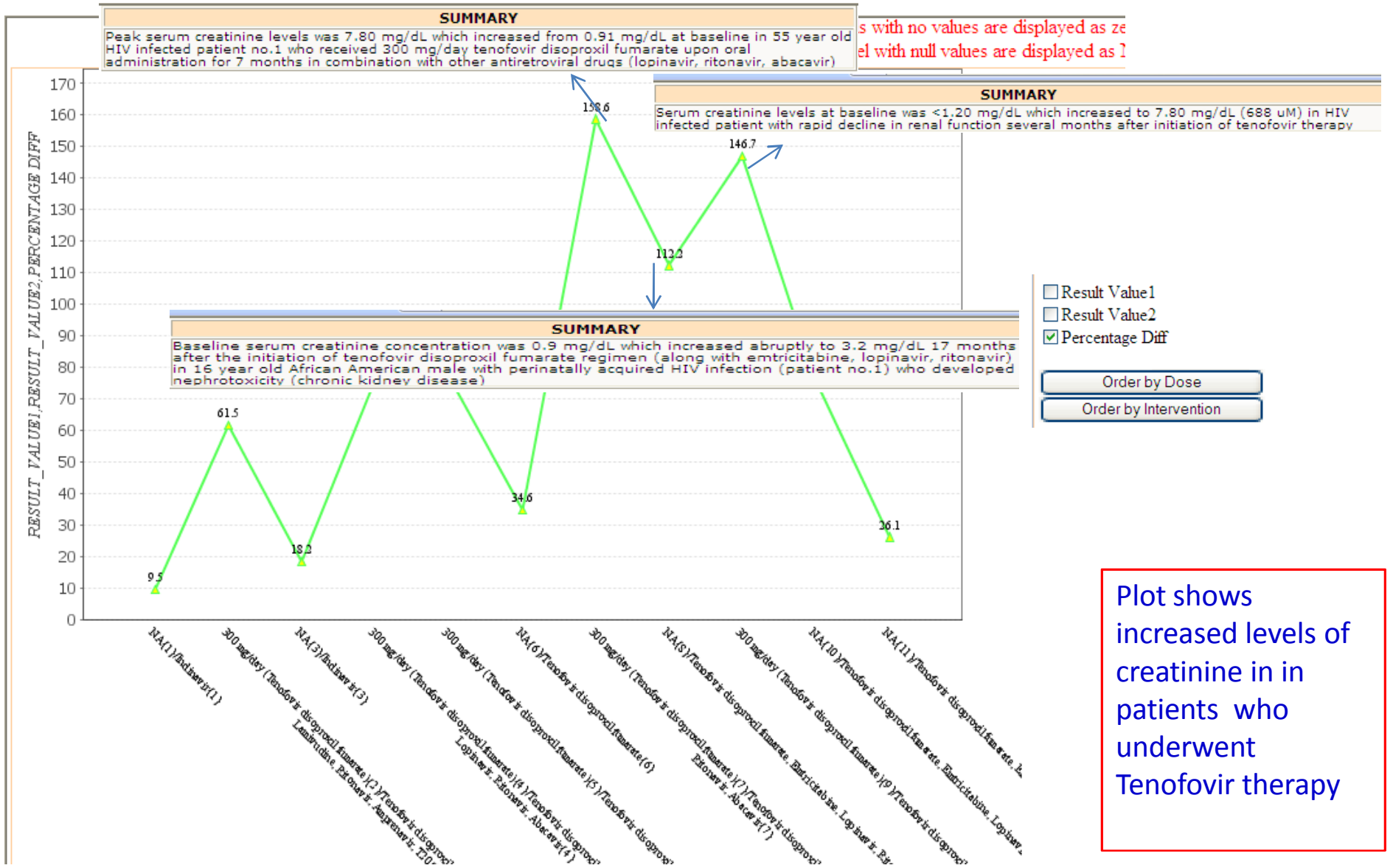
The screenshot shows a web-based interface for data analysis. At the top right, there is a [Go Back](#) link. Below it, there are two dropdown menus: 'Select X-Axis' with 'Intervention' selected, and 'Label' with 'Dose' selected. A red arrow points to the 'Label' dropdown. Below these is a 'Series' section with a list box containing 'Result Value1', 'SD1', 'Result Value2', 'SD2', and 'Sample Size1'. 'Result Value1' and 'Result Value2' are highlighted in blue. At the bottom of the series list is a 'Plot' button.

Select X-axis along with the required label.

In the series, Result value 1 and Result value 2 are selected. These fields store biomarker levels after treatment and at the baseline respectively.

Under which intervention creatinine levels increases in HIV patients?





Plot shows increased levels of creatinine in patients who underwent Tenofovir therapy