

Client: Example Client ABC123 123 Test Drive Salt Lake City, UT 84108

UNITED STATES

Physician: Doctor, Example

**Patient: Patient, Example** 

**DOB** 7/19/1978

Male Gender:

**Patient Identifiers:** 01234567890ABCD, 012345

**Visit Number (FIN):** 01234567890ABCD **Collection Date:** 00/00/0000 00:00

## Phenytoin, Free and Total

ARUP test code 0090141

Phenytoin - Free Level

1.7 ug/mL

(Ref Interval: 1.0-2.5)

Phenytoin - Total

19.4 ug/mL

(Ref Interval: 10.0-20.0)

Phenytoin - Percent Free

8.8 %

(Ref Interval: 8.0-14.0)

INTERPRETIVE INFORMATION: Phenytoin, Free And Total

Phenytoin - Total Therapeutic: 10.0-20.0 ug/mL

Toxic: Greater than 30.0 ug/mL

Phenytoin - Free Level Therapeutic: 1.0-2.5 ug/mL

Toxic: Greater than 2.5 ug/mL

Phenytoin - Percent Free 8.0-14.0%

The therapeutic range is based on serum pre-dose (trough) draw at steady-state concentration. Free phenytoin may be important to monitor in patients with altered or unpredictable protein binding capacity because phenytoin is highly bound (greater than 90 percent) at therapeutic concentrations. Phenytoin is also subject to drug-drug interactions due to displacement of protein binding and extensive metabolism. Cross-reactivity with metabolites may account for differences in phenytoin concentrations among analytical methods. Calculating percent free attempts to minimize differences in assay cross-reactivity and may be useful in dose optimization.

H=High, L=Low, \*=Abnormal, C=Critical

4848



VERIFIED/REPORTED DATES				
Procedure	Accession	Collected	Received	Verified/Reported
Phenytoin - Free Level	22-178-122162	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Phenytoin - Total	22-178-122162	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Phenytoin - Percent Free	22-178-122162	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

H=High, L=Low, \*=Abnormal, C=Critical