

Order ID B26368

Sample Provider MD

Specimen

Collected 09/23/2024 09/24/2024 Received

Test Order

Created 09/24/2024 Reported 09/27/2024 Patient

**MRN** 

Sample,

Female - 01/01/2001

Gender - DOB

MRN12345

# **AVISE HCQ Test Report**



1284.4 ng/mL - Supratherapeutic

Current HCQ Dose (mg/day)

400

Current and Prior 5 HCQ Levels ≥2,000 1,750 Supratherapeutic (>1200 ng/mL): 1,500 1,250 HCQ (ng/mL) 1,000 750 500 250 0 09/23/24 Date

# HCQ Level

Interpretation & Considerations

Level associated with clinical efficacy. HCQ is likely absorbed effectively. However, levels >1200 ng/ml have a minimal added benefit compared to levels in the therapeutic range (750 ng/ml - 1200 ng/ml). Thus, adjusting HCQ doses to maintain blood levels in the therapeutic range may maximize efficacy while limiting toxicity.

**Therapeutic** (750-1200 ng/mL):

Levels associated with clinical efficacy. HCQ is likely to be absorbed effectively.

Subtherapeutic (200-<750 ng/mL): Patient may be partially adherent to therapy. Patients with HCQ < 750 ng/mL can be at greater risk for disease flare. Thus, adjusting HCQ doses and/or discussing barriers to compliance may maximize efficacy.

Underexposed (<200 ng/mL):

Patient is likely non-adherent to HCQ therapy.

## Risk Factors

Level (ng/mL)

Dose (mg/day)

Supratherapeutic: Excessive HCQ levels may arise from (1) chronic kidney disease stage ( $\geq$ 3 associated with higher odds), (2) HCQ dose (400 mg/day associated with higher odds compared to 200mg/day) and (3) substantial weight loss<sup>7</sup>.

### **Test Method Description**

619.9

200

200

HCQ concentration is determined by Liquid Chromatography coupled with Mass Spectrometry (LC/MS/MS)

400

Test limitations: This test has not been validated in pediatric populations. This test should not be performed on patients receiving HCQ therapy for less than 6 months. This test cannot be used to assess the risk of HCQ toxicity.

#### References

- Garg S, et al. Arthritis Care Res. 2024 Feb;76(2):241-250. doi: 10.1002/acr.25228.
- Petri M, et al. Arthritis Rheumatol. 2020 Mar; 72(3):448-453. doi: 10.1002/art.41121.
- Costedoat-Chalumeau N, et al. Ann Rheum Dis. 2013 Nov;72(11):1786-1792. doi: 10.1136/annrheumdis-2012-202322.

1284.4

400

- Costedoat-Chalumeau N, et al. Best Pract Res Clin Rheumatol. 2013 Jun;27(3):329-340. doi: 10.1016/j.berh.2013.07.001.
- Frances C, et al. Arch Dermatol. 2012 Apr;148(4):479-84. doi: 10.1001/archdermatol.2011.2558.
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