

Review of: "Italian Position Paper (SIPMO-SICMF) on Medication-Related Osteonecrosis of the Jaw (MRONJ)"

Roman Guggenberger¹

¹ University Hospital of Zurich

Potential competing interests: No potential competing interests to declare.

As a radiologist interested in MRONJ, I highly liked reading this review article as it nicely summarizes known and controversial aspects of MRONJ diagnosis and treatment.

In particular, I like the way imaging is taken into account in the diagnostic process.

However, I would like to also see brief comments on the increasing role of MRI in jaw and especially MRONJ imaging. With new bone-specific sequences it is now also possible to depict (jaw) bone with almost equal quality compared to CBCT/MDCT but with the inherent optimal soft tissue contrast of MRI. In addition, functional imaging, e.g. perfusion or diffusion weighted imaging may reveal additional disease aspects to mere morphologic imaging. Recent developments in MRI have also contributed to acceleration of image acquisition without substantial compromise on image quality.

As an active researcher in this field I therefore suggest to include following papers:

Getzmann JM, Huber FA, Nakhostin D, Deininger-Czermak E, Schumann P, Finkenstaedt T, Del Grande F, Guggenberger R. Impact of acceleration on bone depiction quality by ultrashort echo time magnetic resonance bone imaging sequences in medication-related osteonecrosis of the jaw. *Eur J Radiol Open*. 2022 Apr 23;9:100421. doi: 10.1016/j.ejro.2022.100421. PMID: 35494189; PMCID: PMC9052068.

Schumann P, Morgenroth S, Huber FA, Rupp NJ, Del Grande F, Guggenberger R. Correlation of dynamic contrast-enhanced bone perfusion with morphologic ultra-short echo time MR imaging in medication-related osteonecrosis of the jaw. *Dentomaxillofac Radiol*. 2022 Feb 1;51(2):20210036. doi: 10.1259/dmfr.20210036. Epub 2021 Aug 18. PMID: 34406841; PMCID: PMC8802699.

Huber FA, Schumann P, von Spiczak J, Wurnig MC, Klarhöfer M, Finkenstaedt T, Bedogni A, Guggenberger R. Medication-Related Osteonecrosis of the Jaw-Comparison of Bone Imaging Using Ultrashort Echo-Time Magnetic Resonance Imaging and Cone-Beam Computed Tomography. *Invest Radiol*. 2020 Mar;55(3):160-167. doi: 10.1097/RLI.0000000000000617. PMID: 31688157.