ARIA MRI Protocol

ASNR Recommended Reporting Framework

AD therapy enrollment template¹

SPECIFICATIONS <u>(</u>@) Baseline imaging for cognitive impairment or assessment prior to **Description** > initiating anti amyloid therapy **Examination** MRI of the brain without contrast > History > [Memory loss] [Describe duration, main symptoms, and biomarkers] **Blood sensitive sequence** [SWI] or [GRE/T2*] > Potential to use both depending on institution **Field strength** [3T] or [1.5T] > Comparison [None Available] >

FINDINGS

Total microhemorrhages	>	[Number] [Describe location(s), deep vs lobar]
Superficial siderosis	>	[None] or [1 focal area of superficial siderosis] or [2 focal areas of superficial siderosis] or [>2 focal areas of superficial siderosis] [general description of other acute or chronic findings]

IMPRESSION

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Total microhemorrhages [0-4] or [5-9] or $[\ge 10]$. Superficial siderosis is [not detected] or [present]. [Other impression points]

Abbreviations: ARIA=amyloid-related imaging abnormalities; GRE=gradient recalled echo; SWI= susceptibility-weighted imaging; T= Tesla; T2=T2-weighted image. Reference: 1. ASNR. https://www.asnr.org/wp-content/uploads/2023/07/AJNR_ARIA_white_paper_templates_20230713.pdf [Accessed November 2024].

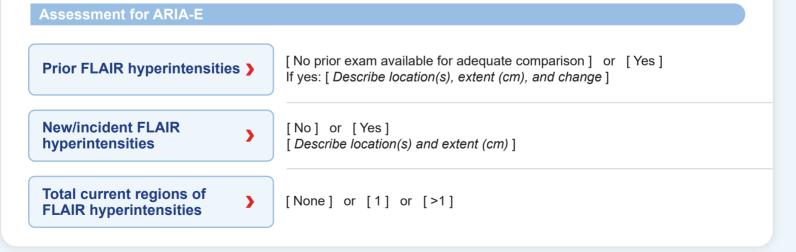
ARIA MRI Protocol

ASNR Recommended Reporting Framework

AD therapy monitoring template

SPECIFICATIONS		
Description	>	Follow up imaging for patients undergoing treatment with an amyloid-lowering antibody therapy
Examination	>	MRI of the brain without contrast
History	>	If information is available: [Include agents, doses received, date of last dose, and symptoms if present]
Blood sensitive sequence Potential to use both depending on institution	>	[SWI] or [GRE/T2*]
Field strength	>	[3T] or [1.5T]
Comparison	>	[None Available]

FINDINGS



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Abbreviations: ARIA-E = Amyloid Related Imaging Abnormalities-Edema/Effusion; ARIA-H = Amyloid Related Imaging Abnormalities-Hemosiderin deposits; FLAIR = Fluid-Attenuated Inversion Recovery; GRE = Gradient Recalled Echo; MRI = Magnetic Resonance Imaging. SWI = Susceptibility Weighted Imaging. Reference: 1. ASNR. https://www.asnr.org/wp-content/uploads/2023/07/AJNR_ARIA_white_paper_templates_20230713.pdf [Accessed November 2024]. 2. Cogswell PM et al. Am J Neurol. 2022;43:e19-35.



ASNR Recommended Reporting Framework

Assessment for ARIA-H		
Microhemorrhages at pre-treatment baseline	>	[0-4] or [5-9] or [≥10] If present: [<i>Describe locations, image, and slice number</i>]
Prior treatment emergent microhemorrhages	>	[No prior treatment monitoring exam available for adequate comparison] or [<i>Number of definite microhemorrhages present on prior monitoring exam</i>] If present: [<i>Describe locations</i>]
New microhemorrhages	>	[<i>Number of definite new microhemorrhages since prior exam</i>] If present: [<i>Describe locations</i>]
Total treatment emergent microhemorrhages = prior treatment emergent + new microhemorrhages	>	[0-4] or [5-9] or [≥10]
Prior treatment emergent siderosis	>	[No prior exam available for adequate comparison] or [<i>Number of prior focal areas of superficial siderosis</i>]
New siderosis	>	[Number of new focal area of superficial siderosis]
Total treatment emergent focal areas of superficial siderosis	>	[1 focal area of superficial siderosis] or [2 focal areas of superficial siderosis] or [>2 focal areas of superficial siderosis]
Impression		
	>	Since [<i>Date of prior</i>]: [Unchanged] or [Increased] or [Decreased]findings of [ARIA-E] or [ARIA-H microhemorrhage] or [ARIA-H superficial siderosis] most notable in [<i>Area or areas of the brain with the greatest change</i>] Findings for: [No] or [Mild] or [Moderate] or [Severe]ARIA-E [No] or [Mild] or [Moderate] or [Severe]ARIA-H microhemorrhages [No] or [Mild] or [Moderate] or [Severe]ARIA-H related siderosis

Abbreviations: ARIA-E = Amyloid Related Imaging Abnormalities-Edema/Effusion; ARIA-H = Amyloid Related Imaging Abnormalities-Hemosiderin deposits; FLAIR = Fluid-Attenuated Inversion Recovery; GRE = Gradient Recalled Echo; MRI = Magnetic Resonance Imaging. SWI = Susceptibility Weighted Imaging. Reference: 1. ASNR. https://www.asnr.org/wp-content/uploads/2023/07/AJNR_ARIA_white_paper_templates_20230713.pdf [Accessed November 2024]. 2. Cogswell PM et al. Am J Neurol. 2022;43:e19-35.



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