

Figure 2 The unruptured intracranial aneurysm treatment score

The unruptured intracranial aneurysm treatment score (UIATS) model includes and quantifies the key factors for clinical decision-making in the management of unruptured intracranial aneurysms (UIAs), developed based on relevance rating data from Delphi consensus rounds 1-4.¹⁸ To calculate a management recommendation for a UIA, the number of points corresponding to each patient-, aneurysm-, or treatment-related feature on both management columns of the scoring form ("in favor of UIA repair" and "in favor of UIA conservative management") are added up. This will lead to 2 numerical values, 1 favoring aneurysm repair (surgical or endovascular), and 1 favoring conservative management. The definitions for each category and factor are found in the Methods section. For cases with a score difference of 3 points or more, the direction, i.e., the difference between the calculated numerical values on each side of the recommendation columns, will suggest an individual management recommendation (i.e., aneurysm repair or conservative management). For cases that have similar aneurysm treatment and conservative management scores (± 2 point difference or less), the recommendation is "not definitive" and either management approach could be supported, as additional factors apart from those used in the development of UIATS may be considered in making a final decision regarding the management recommendation and long-term follow-up. For cases with multiple aneurysms, every aneurysm must be evaluated separately, which will then also result in separate recommendations for each aneurysm. *The minimal intervention-related risk is always added as a constant factor (5 points). AComA = anterior communicating artery; BasA = basilar artery; BP = blood pressure; multiple = multiple selection category; PComA = posterior communicating artery; SAH = subarachnoid hemorrhage; single = single selection category.

	Feature	Points	Management Recommendation		
			Favors UIA repair	Favors UIA conservative management	
Patient	Age (single)	< 40 years	4	<input type="checkbox"/>	
		40-60 years	3		
		61-70 years	2		
		71-80 years	1		
		> 80 years	0		
	Risk factor incidence (multiple)	Previous SAH from a different aneurysm	4	<input type="checkbox"/>	
		Familial intracranial aneurysms or SAH	3		
		Japanese, Finnish, Inuit ethnicity	2		
		Current cigarette smoking	3		
		Hypertension (systolic BP > 140 mm Hg)	2		
		Autosomal-polycystic kidney disease	2		
		Current drug abuse (cocaine, amphetamine)	2		
		Current alcohol abuse	1		
	Clinical Symptoms related to UIA (multiple)	Cranial nerve deficit	4	<input type="checkbox"/>	
		Clinical or radiological mass effect	4		
Thromboembolic events from the aneurysm		3			
Epilepsy		1			
Other (multiple)	Reduced quality of life due to fear of rupture	2	<input type="checkbox"/>		
	Aneurysm multiplicity	1			
Life expectancy due to chronic and/or malignant Diseases (single)	< 5 years	4	<input type="checkbox"/>		
	5 - 10 years	3			
	> 10 years	1			
Comorbid disease (multiple)	Neurocognitive disorder	3	<input type="checkbox"/>		
	Coagulopathies, thrombophilic diseases	2			
	Psychiatric disorder	2			
Aneurysm	Maximum diameter (single)	≤ 3.9 mm	0	<input type="checkbox"/>	
		4.0-6.9 mm	1		
		7.0-12.9 mm	2		
		13.0-24.9 mm	3		
		≥ 25 mm	4		
	Morphology (multiple)	Irregularity or lobulation	3	<input type="checkbox"/>	
		Size ratio > 3 or aspect ratio > 1.6	1		
	Location (single)	BasA bifurcation	5	<input type="checkbox"/>	
		Vertebral/basilar artery	4		
		AcomA or PcomA	2		
	Other (multiple)	Aneurysm growth on serial imaging	4	<input type="checkbox"/>	
		Aneurysm de novo formation on serial imaging	3		
		Contralateral stenooclusive vessel disease	1		
	Treatment	Age-related risk (single)	< 40 years	0	<input type="checkbox"/>
			41-60 years	1	
61-70 years			3		
71-80 years			4		
> 80 years			5		
Aneurysm size-related risk (single)		< 6.0 mm	0	<input type="checkbox"/>	
		6.0-10.0 mm	1		
		10.1-20.0 mm	3		
		> 20 mm	5		
Aneurysm complexity-related risk		High	3	<input type="checkbox"/>	
	Low	0			
Intervention-related risk	Constant*		<input type="checkbox"/>		
			5	<input type="checkbox"/>	
				<input type="checkbox"/>	