

Genetic predictors for sinusoidal obstruction syndrome – a systematic review

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Supplementary information A03

Table S03. Quality assessment tool: Detailed description for scoring (0-12 possible points; based on STREGA checklist¹ and adapted from Zazuli et al. and Leusink et al.).^{2,3}

No.	Quality aspect	Points
1	Quality of clinical information	
	a. 1 point: mention the type of HSCT (allo/ auto) and the conditioning regimen	
	b. 1 point: adequate [description of] selection of participants with inclusion criteria, SOS criteria or objective lab parameters and baseline characteristics	
2	Quality of genotyping	
	a. 1 point: consideration of the Hardy–Weinberg equilibrium	
	b. 1 point: consideration of genotyping quality, for example, by reporting percentage of successful genotyping attempts or cross validation with a different technique	
3	Quality in reporting of study population origin	
	a. 1 point: mention geographical point of sample collection	
	b. 1 point: stratification or exclusion based on ethnicity, or statistical correction for population origin	
4	Quality of sample size estimation and statistical correction for multiple testing	
	a. 1 point: describe the power analysis to determined sample size	
	b. 1 point: any correction for multiple testing (e.g. Bonferroni, FDR)	
5	Quality of study setup and analysis	
	a. 1 point: description of possible variables that might affect outcome (e.g. treatment characteristics, patient risk factors, etc.)	
	b. 1 point: genotype-phenotype association adjusted for differences in treatments, patient risk factors etc. (multivariable analysis)	
6	Replication of identified variants	
	a. 1 point: replication of genetic variant associations in an independent cohort	
	b. 1 point: independent cohort is comparable to discovery cohort OR adequate correction for differences (multivariable analysis including variables associated with major differences in the discovery and replication cohort)	
Total points		(0 – 12)

Table S04. Quality assessment of 27 included studies on genetic predictors for sinusoidal obstruction syndrome after HSCT or chemotherapy; after agreement was reached between authors.

Study author, journal, year	Clinical information		Genotyping		Study population origin		Sample size and statistical correction for multiple testing		Setup and analysis		Replication		Total points (agreement between reviewers)
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	
Duggan C, et al. Bone Marrow Transplant. 1999. ¹	1	1	0	0	1	0	0	0	0	0	0	0	3
Aplenc R, et al. Acta Haematologica. 2003 ²	1	1	0	0	1	0	0	0	0	0	0	0	3
Pihusch M, et al. Transplantation. 2004 ³	1	1	0	0	1	0	0	0	0	0	0	0	3
Srivastava A, et al. Blood. 2004 ⁴	1	1	0	0	1	0	0	0	1	1	0	0	5
Kallianpur AR et al. Bone Marrow Transplant. 2005 ⁵	1	1	1	1	1	1	0	0	1	1	0	0	8
Lennard L, et al. Clin. Pharmacol. Ther. 2006 ⁶	1	1	0	0	1	0	0	0	1	0	0	0	4
Elmaagacli AH, et al. Bone Marrow Transplant. 2007 ⁷	1	1	0	0	1	0	0	0	0	0	0	0	3
Goekkurt E, et al. Anticancer Res. 2007 ⁸	1	1	1	1	1	0	0	0	1	1	0	0	7
Kim I, et al. Annals of Hematol. 2007 ⁹	1	1	0	1	1	0	0	0	1	0	0	0	5
Lee KH, et al. Haematologica. 2007 ¹⁰	1	1	1	0	1	0	0	0	1	1	0	0	6
Zwaveling J, et al. Therapeut Drug Monitor. 2008 ¹¹	1	1	1	0	1	0	0	0	0	0	0	0	4
Johnson L, et al. J Clin Pharmacol. 2008 ¹²	1	1	1	1	1	0	0	0	0	0	0	0	5
Rocha V, et al. Leukemia. 2009 ¹³	1	1	0	0	1	0	0	0	1	1	0	0	5
Elbahlawan L, et al. J Ped Hem Oncol. 2012 ¹⁵	1	1	1	1	1	0	0	0	0	0	0	0	5
Sucak GT, et al. Ann Hematology. 2012 ¹⁶	1	0	0	0	1	0	0	0	0	0	0	0	2
Krivoi N, et al. Curr Drug Safety. 2012 ¹⁷	1	1	0	0	1	0	0	0	0	0	0	0	3
Uppugunduri CRS, et al. Pharmacogenom J. 2014 ¹⁹	1	1	1	0	1	0	0	0	0	0	0	0	4
Vreuls CPH, et al. Brit J Cancer. 2013 ²⁰	1	1	0	0	1	0	0	0	1	1	0	0	5
Efrati E, et al. Bone Marrow Transplant. 2014 ²¹	1	0	0	0	1	0	0	0	0	0	0	0	2
Wray L, et al. Pediatr Blood Cancer. 2014 ²²	1	1	1	1	1	1	1	0	1	1	0	0	9
Seifert C, et al. J. Cancer Res. Clin. Oncol. 2015. ²³	1	1	0	0	1	0	0	0	1	1	0	0	5
Ansari M, et al. Bone Marrow Transplant. 2016 ²⁴	1	1	0	0	1	0	0	0	1	0	0	0	4
Byun JM, et al. PloS One. 2016 ²⁵	1	1	0	0	1	0	0	0	1	1	0	0	5
Huezo-Diaz Curtis P, et al. Pharmacogenomics J. 2016 ²⁷	1	1	1	0	1	0	1	0	0	0	0	0	5
Ansari M, et al. Oncotarget. 2017 ²⁸	1	1	1	0	1	0	0	0	1	1	0	0	6
Ansari M, et al. Biol Blood Marrow Transpl. 2020 ^{29,†}	1	1	1	0	1	0	0	1	1	1	1	0	8
Terakura S, et al. Int J Hematol. 2020 ³¹	1	1	0	0	1	0	0	0	1	0	0	0	4

Legend: †, includes populations described in Ansari M, et al. Bone Marrow Transplant. 2010¹⁴ and Ansari M, et al. Bone Marrow Transplant. 2013;¹⁸ Green shading: SOS after antineoplastic agent exposure.

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