Table 1. Actual forms of spin in clinical studies evaluating performance of biomarkers in ovarian cancer.

Category of spin	**Type of spin**	**Criteria**	**Spin frequency, n= 200** **n (%) [95% CI]**
Misrepresentation **a. 1**	Incorrect presentation of results in the abstract or discussion conclusion	Abstract conclusion OR discussion conclusion for BM's clinical performance is not in accordance with or is stronger than results justify. Actual spin if all the following: a. Exaggerating the performance of the BM in the conclusion despite low performance measures reported in the results; b. Claiming effect of the BM despite statistically non-significant results; **c.** Claiming effect despite not providing imprecision or statistical test (confidence interval or *P* values) between different biomarker models tested or patient groups (subgroups);	**40 (20% [15% - 26%])** Frequency in the abstract conclusion: (7% [4% - 12%]) Frequency in the discussion conclusion: (18.5% [14% - 25%])
a. 2	Mismatch between results reported in abstract and main text	Results reported in the abstract is not in accordance with results reported in main text. Actual spin if all the following: a. Results reported in the abstract contains statement in which statistical significance is claimed, despite not providing imprecision or test of significant (CI or p-values) in results reported in the main text;	**33 (16.5% [12% - 23%])**

		b. Selective reporting of statistically significant outcomes in the abstract compared to the results reported in the main text; c. Results reported in the abstract that do not match results provided in the main text;	
a. 3	Mismatch in title	The title contains wording misrepresenting BM's clinical performance compared to results in the main text;	**11 (5.5% [3% - 10%])**

Category of spin	**Type of spin**	**Criteria**	**Spin frequency, n= 200** **n (%) [95% CI]**
Misinterpretation **a. 4**	Other purposes of biomarker claimed not pre-specified and/or investigated	Abstract conclusion OR discussion conclusion contains statement suggesting BM purposes not pre-specified and/or investigated.	**Total: 65 (32.5% [26% - 40%])** Frequency in the abstract conclusion: (20.5% [13% - 24%]) Frequency in the discussion conclusion: (30% [24% - 37%])
a. 5	Mismatch between intended aim and abstract or discussion conclusion	Abstract conclusion OR discussion conclusion for BM's clinical performance is stronger than study design. Actual spin if all the following: a. The discussion conclusion contains statement in which BM utility is claimed	**Total: 57 (28.5% [23% - 35%])** Frequency in abstract conclusion: (20.5%) [15% - 27%]) Frequency in discussion conclusion: (15.5%) [11% - 21%])

		despite not evaluating clinical effectiveness (i.e. useful); b. The discussion conclusion contains statement in which BM performance improvement is claimed despite not evaluating incremental measures (i.e. improve); c. The discussion conclusion contains statement that uses causal language for BM(s) being assessed despite the use of a nonrandomized design;	
a. 6	Other benefits of BM claimed not pre-specified and/or investigated	The discussion conclusion contains statement claiming BM benefits not pre-specified and/or investigated.	**10 (5% [3% - 9%])**
a. 7	Extrapolation from study participants to a larger or a different population	The discussion conclusion contains statement that extrapolates BM's clinical performance to a larger or a different population, not supported by recruited subjects.	**10 (5% [3% - 9%])**

***** All results presented in abstract and main text, excluding supplementary material.

Abbreviations: BM, biomarker; HR, hazard ratio; OS, overall survival; PFS, progression-free survival

Table 2. Facilitators of spin in clinical studies evaluating performance of biomarkers in ovarian cancer.

Potential facilitators of spin	**Spin frequency, n= 200 n (%) [95% CI]**
Not stating sample size calculations	200 (100% [98% - 100%])
Not mentioning potential harms	200 (100% [98% - 100%])
Not pre-specifying a positivity threshold for continuous biomarker	84/164* (51.2% [43% - 59%])
Incomplete or not reporting imprecision or statistical test for data shown	26 (13% [9% - 19%])
Study objective not reported or unclear	24 (12% [8% - 18%])

* 164 articles included evaluation of continuous biomarkers.