

Response to the Editor and Reviewers

Manuscript number: jdb-3690102

Title: Signaling Pathways in Human Blastocyst Development: From Molecular Mechanisms to In Vitro Optimization

Reviewer #2

Comment: “The authors have addressed all the concerns raised by the reviewers. There is no further comments.”

Response: We sincerely appreciate your encouraging remarks and confirmation that our revision has addressed the concerns.

Comment: “One minor suggestion is to place the title of the table above the table rather than below the table, which is different from figure legends.”

Response: Thank you for this helpful suggestion. We have revised the manuscript accordingly by moving the table titles above the corresponding tables. **(page 4, Table 1).**

Table 1. Effects of small molecule modulators on preimplantation development of real human embryos.[†]

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Small Molecule [‡]	Target Pathway [‡]	A./I. [‡]	Embryo number [‡]	Treatment Duration [‡]	Blastocyst [‡]				Ref. [‡]	
					Concentration [‡]	Development [‡]	ICM TE Marker [‡]	PrE Marker [‡]		
										Rate (control) [‡]
CRT0276121 [‡]	Hippo [‡]	A. [‡]	12 [‡]	pre-compaction – blastocyst stage [‡]	1.5 μ M [‡]	25% (83%) [‡]	→ [‡]	↓ [‡]	– [‡]	[29] [‡]
TRULI [‡]	Hippo [‡]	I. [‡]	5 [‡]	pre-compaction – blastocyst stage [‡]	2.5 μ M [‡]	100% (100%) [‡]	↑ [‡]	↓ [‡]	– [‡]	[30] [‡]