

Supplementary File

Table 1: Six Cases and Structural Risk Configurations

Case	Year	Initial Platform	Core Allegation Type	Category of Alleged Misconduct	Institutional Sensitivity
Tablecloth	2021	Weibo	Experimental image reuse and research protocol irregularities	Textual and technical academic misconduct	Low
Data Fabrication	2022	PeerHub, Weibo	Data Fabrication	Textual and technical academic misconduct	Low
Scratched Ruler	2023	PeerHub, Weibo	Duplicated Image and data fabrication	Textual and technical academic misconduct	Low
Male Endometriosis Sample	2025	PeerHub, Weibo	implausible sample and data irregularities	Textual and technical academic misconduct	Low
Supervisor Case	2024	Zhihu	Data fabrication and supervisory abuse of power	Academic misconducts involving hierarchical coercion	Medium
“4+4” Controversy	2025	WeChat, Weibo	Improper authorship, substandard academic quality, and legitimacy of admission and training	Educational fairness and governance legitimacy concerns	High

Notes:

1. The “4+4” Controversy centered on Dong Xiying, a China-Japan Friendship Hospital physician and graduate of the Peking Union Medical College “4+4” program, an accelerated track granting non-medical undergraduates a medical doctorate after four years, who drew controversy after another physician’s spouse accused her of an improper relationship with her husband and alleged professional advantages, including irregular surgical participation. As online scrutiny intensified, netizens retrieved and examined her dissertation

and publications, alleging significant procedural and academic irregularities. The dispute shifted from personal misconduct to broader questions about admission standards, degree conferral, and residency requirements of the “4+4” pathway. After institutional investigation, 19 officials and administrators across the school and affiliated hospital were held accountable. Rather than centering on discrete data fabrication, the case escalated into a debate over procedural fairness and institutional integrity in elite medical education, constituting a high socio-political sensitivity configuration.

2. The Supervisor Case involved allegations of academic misconduct intertwined with hierarchical coercion. Eleven graduate students released a 125-page dossier accusing their supervisor of data fabrication, image manipulation, improper authorship, and pressuring students to alter results. One student reported being required to write a paper based on pig experiments that had allegedly never been conducted, with the supervisor claiming the animals had died elsewhere. Beyond technical irregularities, the case exposed supervisor-student asymmetry, where academic progression and career prospects depend on the principal investigator. This case represents a medium-risk configuration combining technical verification with academic dependency.

3. The cases of “Tablecloth”, “Data Plagiarism”, “Ruler-Embedded Image” and “Male Endometriosis Sample” constitute low-risk configurations. Although involving biomedical ethics or image and data manipulation, these disputes remained confined to technically verifiable irregularities identifiable through document retrieval and image comparison. They did not escalate into challenges to institutional legitimacy, and attribution boundaries were clear. Overall, these cases fall within relatively straightforward domains of scientific accountability.