Reviewer’s report

Title: Analysis of the effect of the active compound of green tea (EGCG) on the proliferation of peripheral blood mononuclear cells

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Reviewer: Junpeng Wang

Reviewer’s report:

Although Saleh et al. reported here that green tea bioactive component, EGCG, inhibited the proliferation and IFN-# production of PBMC from healthy women and breast cancer patients when stimulated with mitogens and antigen, it was lack of novelty since evidences show that EGCG could suppress non- and antigen-specific T cell proliferation and pro-inflammatory cytokine (IFN-#) production. Thus, more mechanisms on cell proliferation and cytokine production from PBMC should be further measured.

Minor comments:

1. In the whole manuscript, the “IFN#” or “IFN-#” should be consistent.
2. In the methods, PBMCs were stimulated using breast cancer peptides for 6 days; whereas, supernatants were collected 96 hours. Why did the culture use different times? Are there different culture times for the proliferation? Please clarify it.
3. Should the statistical analysis be one-way ANOVA?
4. Should the figure or table for optimal EGCG and antigen peptide concentrations on proliferation added?
5. The author mentioned that they used anti-CD3 or PHA as positive control. Thus, the antigen-specific proliferation and IFN- release should be given more description; whereas, CD3 or PHA on cell proliferation and IFN# release should be deleted.
6. In the discussion, Wilasrusmee [38] and Zvetkova [39] show that tea extract, not , EGCG affect murine lymphocyte proliferation and neopterin production. Please clarify them.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:
None