The manuscript by Linsalata et al. shows a positive correlation between PPARγ expression and SSAT activation in normal and neoplastic mucosal samples of the colon obtained from 40 patients. PPARγ, ODC and SSAT expressions were evaluated, as well as tissue polyamine levels. These parameters were also investigated in relation to the presence of K-ras mutation in the tumor samples.

The study confirms on colorectal samples of patients, the close relationship between polyamine metabolism and PPARγ described "in vitro" on human colorectal cancer cell lines.

This original study is well conducted and methods are clearly described. The data are concisely reported but the following aspects need clarification:

Minor Essential Revisions
1. Background, two last lines of page 4:
   There is an apparent contradiction between the sentence: "Induction of SSAT typically gives rise to growth inhibition", and the following sentence "Moreover, increased SSAT activity has been observed in breast cancer.". This assumption has to be better explained or rephrased since it does not confirm that activation of SSAT is associated with an anti-proliferative effect..

2. In the text of Results, Discussion and in Table 3:
   The terms mutated K-ras or K-ras negative; K-ras wild-type or K ras positive are used alternatively and renders the text confusing. The same term should be used throughout the manuscript to distinguish mutated from non-mutated K-ras.
   How are you excluding that tumor samples may present a mutated K-ras at another location than codon 12?

3. Discussion, end of page 10: Do the authors mean that an increase of SSAT without a concomitant downregulation of the polyamine biosynthetic pathway (ODC inhibition) is insufficient for counteracting tumor development? This point which is also evoked in the conclusions should be discussed by the authors (with some references).

4. Table 3:
   In order to standardize presentation with Tables 2, values for PPAR mRNA should be presented at the bottom of Table 3.

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests below.