Reviewer's report

Title: Human breast cancer associated fibroblasts exhibit subtype specific gene expression profiles

Version: 2 Date: 29 March 2012

Reviewer: Theresa Casey

Reviewer's report:

The manuscript is well written. Results are interesting and relevant/contribute to this area of research. Authors do a nice job summarizing relevant literature/findings as well as describing their own results, particularly principle component analysis and interpretation. However, there are a few "essential revisions" that need to be made before publication. There are also a few notes on typos as well as suggestions for word choice and sentence clarification.

- Major Compulsory Revisions

1. The manuscript does not adhere to the standards for reporting and data deposition; there is no reference to deposit of microarray data in GEO (Gene expression Omnibus), or equivalent, and thus may not be MIAME compliant (see http://www.ncbi.nlm.nih.gov/geo/info/MIAME.html)

- Minor Essential Revisions

1. In materials and methods section, RNA purification and microarrays, authors state 28S/16S ratio--(16S is bacterial) so I believe they mean '18S', also a ratio of >0.75 is rather low; when '2' is optimal, particularly for RNA isolated from cell culture--and maybe reflective of RNA degradation. Do author's have RIN from analysis? If so please report.

- Discretionary Revisions

1. Intro. first sentence; suggest changing "which" to "that"
2. Intro. Authors define Her2-neu as (Her2) in first sentence, and then use 'Her2-neu' in second sentence. In third sentence they define 'Her2-neu' as (Her2+)...this needs to be consistent and defined one time.
3. Intro. page 2, line 9. Word "within" should be changed to "among" or "between".
4. Intro. page 2, first paragraph, last sentence needs a "."
5. Page 4, second line; "P" should be lowercase in platelet.
6. Page 4, first sentence of 2nd paragraph......the way sentence is written, reads as if "RNA" was assigned to one of 2 samples sets, when it is gene expression analysis that were assigned to sample sets.
7. Page 4, third sentence of 3rd paragraph has 2 "."
8. Materials and methods, patient characteristics section; TNBC description should be "lacks expression of ER, PR AND Her2-neu"
9. Figure 4 legend...."most" should be changed to "greatest differences"
10. Figure 5 legend, insert "microarray" in front of results.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
I declare that I have no competing interests