**Location of spots on TMA2**

1. **ER(+ve) IDC:**

Sample 1/ AL13-1– Spots 000, 031, and 081

Sample 2/ AL13-2– Spots 026, 055, and 060

Sample 3/ AL13-3– Spots 005, 046, and 086

Dan sequential edit: 000,005,026,031,055,046,060,086,081

1. **ER(+ve) ILC:**

Sample 1/ AL13-4– Spots 001, 043, and 066

Sample 2/ AL13-5– Spots 011, 061, and 080

Sample 3/ AL13-6– Spots 006, 025, and 076

Sample 4/ AL13-7– Spots 016, 045, and 085

Sample 5/ AL13-8– Spots 030, 056, and 096

Dan sequential edit: 001,006,011,026,025,030,043,045,056,061,066,076,080,085,096

1. **ER(-ve) IDC:**

Sample 1/ AL13-9– Spots 002, 039, and 079

Sample 2/ AL13-10– Spots 012, 052, and 091

Sample 3/ AL13-11– Spots 024, 049, and 089

Sample 4/ AL13-12– Spots 007, 034, and 062

Sample 5/ AL13-13– Spots 017, 036, and 072

Sample 6/ AL13-14– Spots 020, 044, and 071

Sample 7/ AL13-15– Spots 032, 057, and 084

Sample 8/ AL13-16– Spots 029, 067, and 095

Dan sequential edit: 002,007,012,017,020,024,029,032,034,036,039,044,049,052,057,062,067,071,072,079,084,089,091,095

1. **HER2(+ve) IDC:**

Additional ER+ Samples:

Sample 1/ AL13-17– Spots 003, 038, and 068

Sample 2/ AL13-18– Spots 015, 041, and 078

Sample 3/ AL13-19– Spots 013, 053, and 090

Sample 4/ AL13-20– Spots 023, 063, and 088

Sample 5/ AL13-21– Spots 008, 033, and 065

Sample 6/ AL13-22– Spots 018, 048, and 073

Sample 7/ AL13-23– Spots 021, 058, and 083

Sample 8/ AL13-24– Spots 028, 070, and 093

Dan sequential edit: 003,008,013,015,018,021,023,028,033,038,041,048,053,058,063,065,068,070,073,078,083,088,090,093

1. **Cell Lines:**

**MCF7** *(****ER+/PR+****/HER2 weak or -ve/EGFR weak)* – Spots 022, 035, 037, 047, 059, 069, 075, 087

**MCF10A** *(ER-/PR-/HER2 weak or -ve/EGFR weak)* – Spots 004, 014, 050, 097

**MDA-MB-231** *(****ER-/PR-/HER2******-****/EGFR weak)* – Spots 009, 010, 019, 027, 042, 077, 092, 098

**MDA-MB-468** *(ER-/PR-/HER2 -/****EGFR +****)* – Spots 040, 051, 054, 064, 074, 082, 094

**Notes:**

1. **ER(+ve) IDC samples**
2. **Spot 005 in sample AL13-3 was mislabeled as 050 in the previous correspondence (email below).**
3. **Sample AL13-21 is HER2+ve but ER-ve.**

Hi Dan,

Thanks for helping us with the analysis. Here is what you need.

* + - 1. Yes, you’ll need to look into the ER channel images.
      2. The TMA has 100 spots in total. In the GE data, they have numbered these spots/images from 000 to 099 (000-010 in row 1, 011-022 in row 2 and so on…).
      3. If you remember, for each tumor sample, sections were cut from 3 different regions within the tumor. So each sample has 3 spots/images.
      4. ER+ IDC location in the TMA template:

Sample 1/ AL13-1 – Spots 000, 031, and 081

Sample 2/ AL13-2 – Spots 026, 055, and 060

Sample 3/ Al13-3 – Spots 050, 046, and 086

1. ER+ ILC location in the TMA template:

Sample 4/ AL13-4 – Spots 001, 043, and 066

Sample 5/ AL13-5 – Spots 011, 061, and 080

Sample 6/ AL13-6 – Spots 006, 025, and 076

Sample 7/ AL13-7 – Spots 016, 045, and 085

Sample 8/ AL13-8 – Spots 030, 056, and 096

1. Location of ER images in GE data: 136017/ S13120276/ AFRemoved/example: ER\_AFRemoved\_083. These images in the AFRemoved folder are 1. Normalized 2. Registered and 3. Background subtracted.
2. Location of corresponding Dapi images in GE data: 136017/ S13120276/ RegisteredImages/ S001\_dapi\_dapi\_S6\_cy3\_ER\_cy5/example: dapi\_dapi\_S6\_cy3\_ER\_cy5\_S13120276\_S001\_P083\_Z00\_dapi.

DAPI images are not background subtracted (because DAPI does not bleach) and so there are no DAPI images in “AFRemoved” folder, but they are in the “RegisteredImages”.

Hope this helps. Let me know if you have any questions.

Thanks.

Rekha

**From:** Dan Spagnolo [<mailto:dspagnolo09@gmail.com>]   
**Sent:** Wednesday, May 21, 2014 1:04 PM  
**To:** Gyanchandani, Rekha  
**Cc:** Chennubhotla, Chakra S; Lee, Adrian; Sreekumar, Sreeja; Oesterreich, Steffi  
**Subject:** Re: quantifying ER

Hello Rekha,

It has been a while since I have looked at the GE breast cancer data that you have shared with us. If my understanding is correct, for this project I am interested in the ER channel of the multiplexed breast cancer data. Could you assist me in finding the data, specifically the ER channel images, that are associated with the IDC and ILC cores of interest, as seen in the spreadsheet you just shared? For example, in the file structure of the breast cancer data under /136017/S13120276/ , which other folders would I have to navigate into, and what is the naming convention that will allow me to identify the specific cores. Or perhaps Steffi can assist me with this question as well.

Once I have located the data, Chakra and I have already discussed how I will analyze the data, so results will be forthcoming. Thanks for your help!

-Dan