

## Characterization of human breast cancer tissues by infrared imaging

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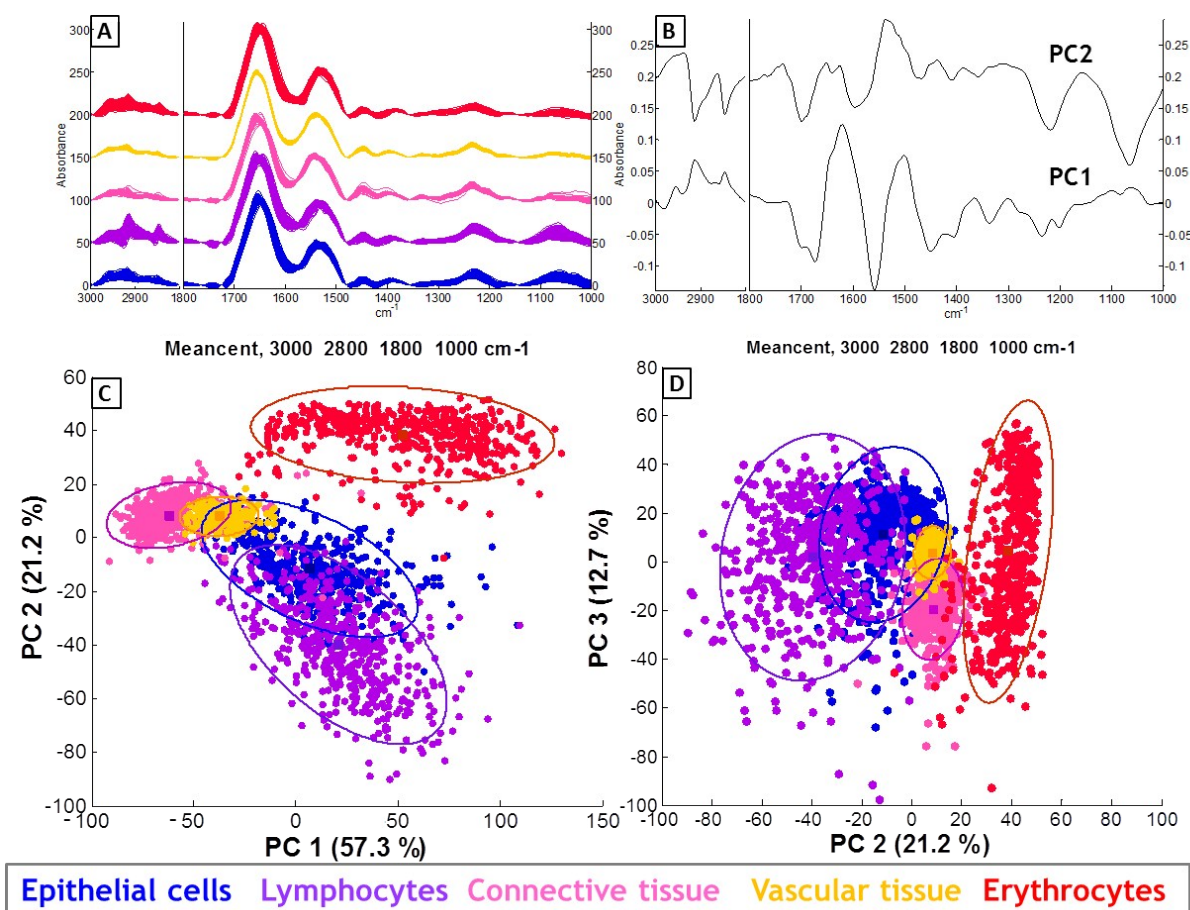
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### SUPPLEMENTAL DATA



**Figure S1:** PCA analysis of IR spectra recorded on the 5 main cell types and tissues found in breast tissue samples. **A.** Subset of 2239 spectra recorded on epithelial tumor cells (blue), lymphocytes (purple), connective tissue (pink), vascular tissue (yellow) and erythrocytes (red) of one patient. **B.** Loading vectors PC1 and PC2 of the PCA. Spectra are offset along the absorbance (Y) axis for clarity. **C, D.** PCA Score plots showing the projection of each spectrum of A in the PC1-PC2 (C) and PC2-PC3 (D) spaces performed on the 3000-2800 and 1800-1000 cm<sup>-1</sup> combined spectral regions. Each dot stands for one spectrum. Percentages on the axis labels indicate the variance described by PC1 (57.3%), PC2 (21.2%) and PC3 (12.7%).

**Table S1:** Table indicating the clinical parameters of each patient.

| Patient | Molecular subtype | Date of Birth | Date of Surgery | Histotype | Size (mm) | Lymph node status | Stage | Grade | KI67 (%) | ER status | PR status |
|---------|-------------------|---------------|-----------------|-----------|-----------|-------------------|-------|-------|----------|-----------|-----------|
| 1       | HER2+/HR-         | 09/25/1960    | 04/17/2013      | Ductal    | 22        | 1                 | IIB   | 3     | 30       | 0         | 0         |
| 2       | HER2+/HR+         | 09/21/1923    | 02/19/2013      | Ductal    | 25        | 1                 | IIB   | 3     | 20       | 1         | 0         |
| 3       | HER2+/HR-         | 09/09/1954    | 05/14/2013      | Ductal    | 19        | 1                 | IA    | 3     | 30       | 1         | 0         |
| 4       | Lobular Luminal A | 01/19/1953    | 10/31/2012      | Ductal    | 22        | 0                 | IIA   | 2     | 10       | 1         | 1         |
| 5       | Lobular Luminal A | 04/11/1956    | 10/04/2012      | Lobular   | 20        | 0                 | IA    | 2     | <10      | 1         | 1         |
| 6       | Lobular Luminal B | 05/18/1944    | 02/22/2013      | Lobular   | 31        | 1                 | IIIA  | 2     | 20       | 1         | 1         |
| 7       | Luminal A         | 09/16/1948    | 10/09/2012      | Ductal    | 11        | 0                 | IA    | 1     | 10       | 1         | 1         |
| 8       | Luminal A         | 01/20/1973    | 04/19/2013      | Ductal    | 10        | 0                 | IA    | 1     | <5       | 1         | 1         |
| 9       | Luminal B         | 12/10/1974    | 12/10/2012      | Ductal    | 56        | 1                 | IIIC  | 3     | 30       | 1         | 0         |
| 10      | Luminal B         | 11/29/1965    | 01/23/2013      | Mixt      | 22        | 0                 | IIA   | 2     | 25       | 1         | 0         |
| 11      | Mucinous          | 09/29/1942    | 10/31/2012      | Mucinous  | 15        | 0                 | IIA   | 1     | 10       | 1         | 1         |
| 12      | Triple Negative   | 05/28/1941    | 03/01/2013      | Ductal    | 17        | 0                 | IA    | 3     | 40       | 0         | 0         |
| 13      | Triple Negative   | 08/29/1924    | 05/03/2013      | Ductal    | 19        | 0                 | IA    | 3     | 90       | 0         | 0         |