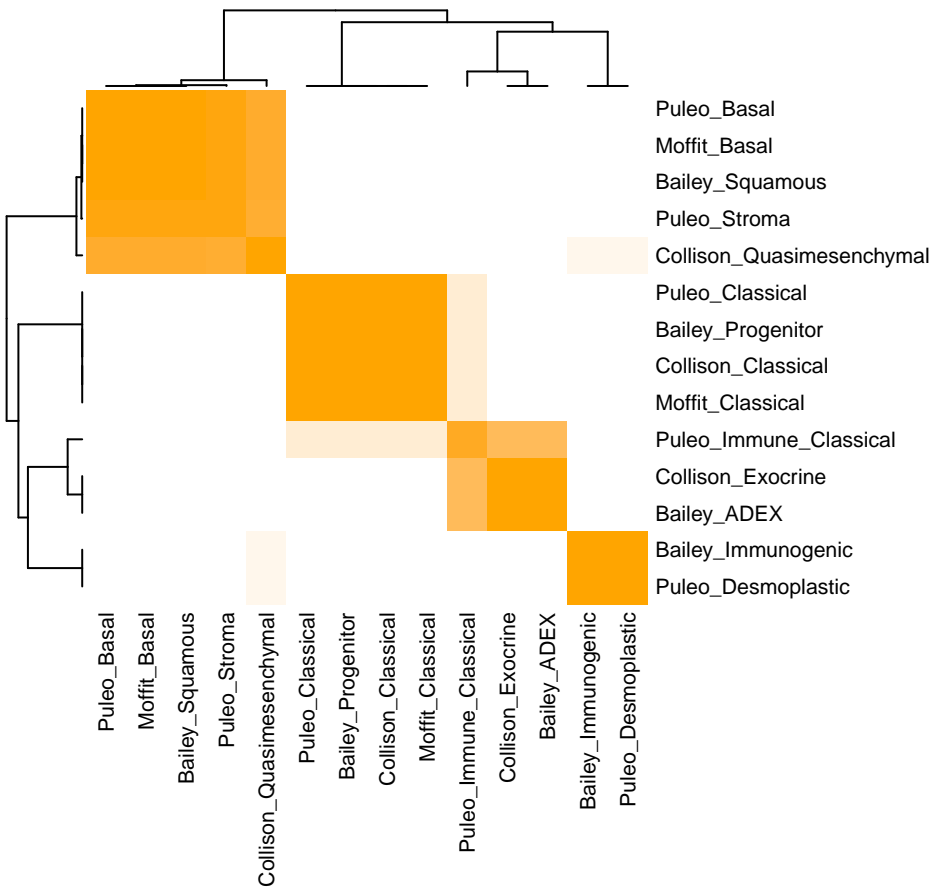
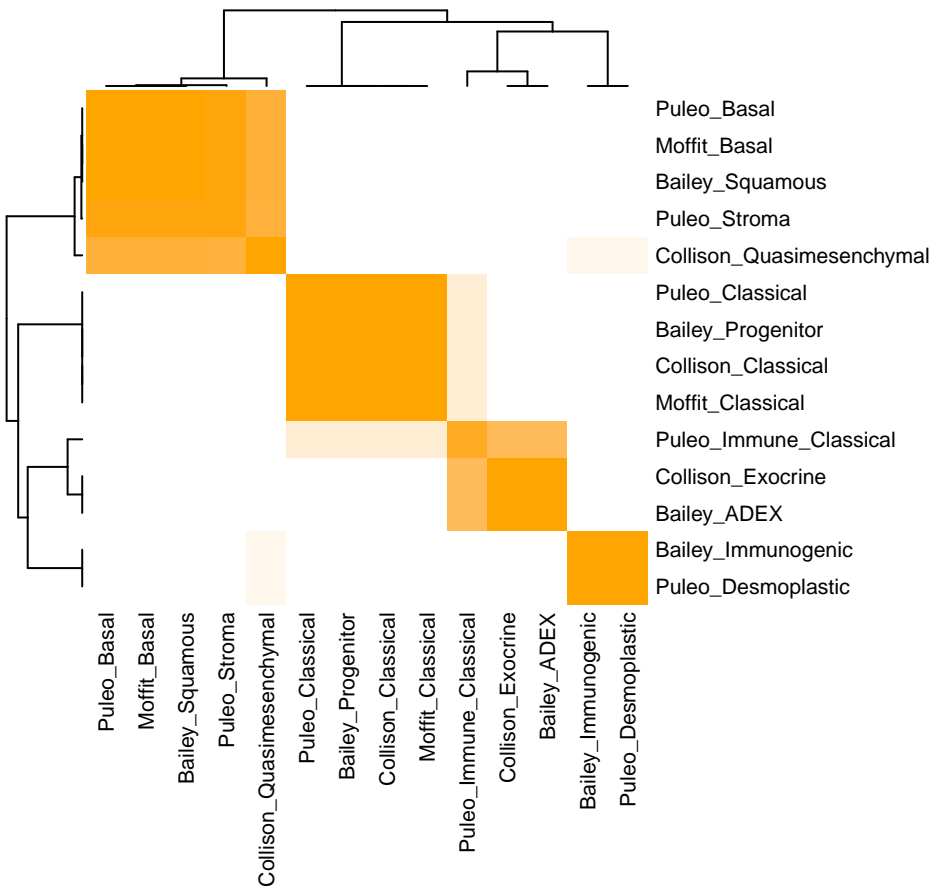
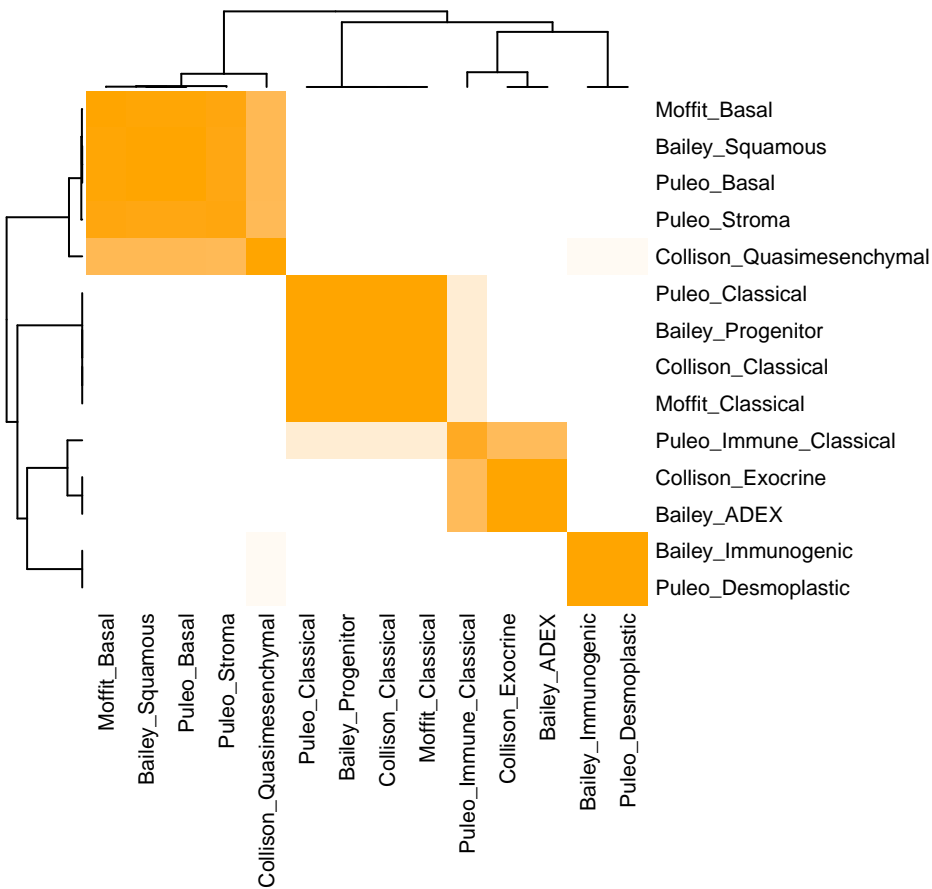


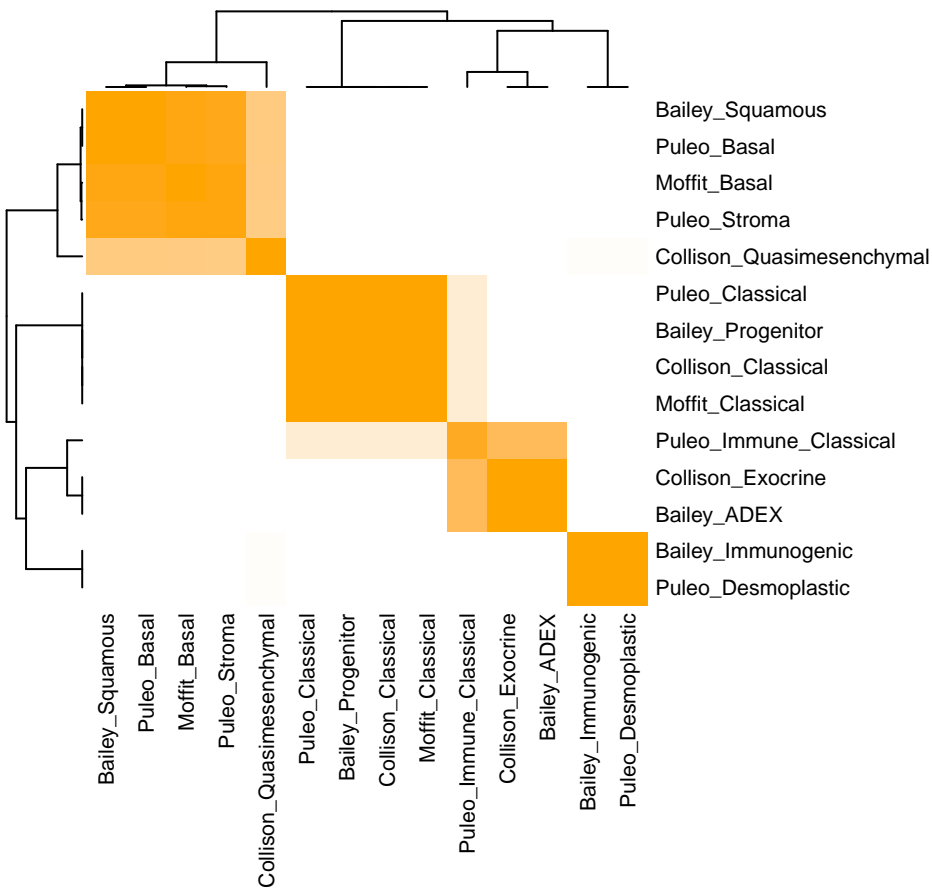
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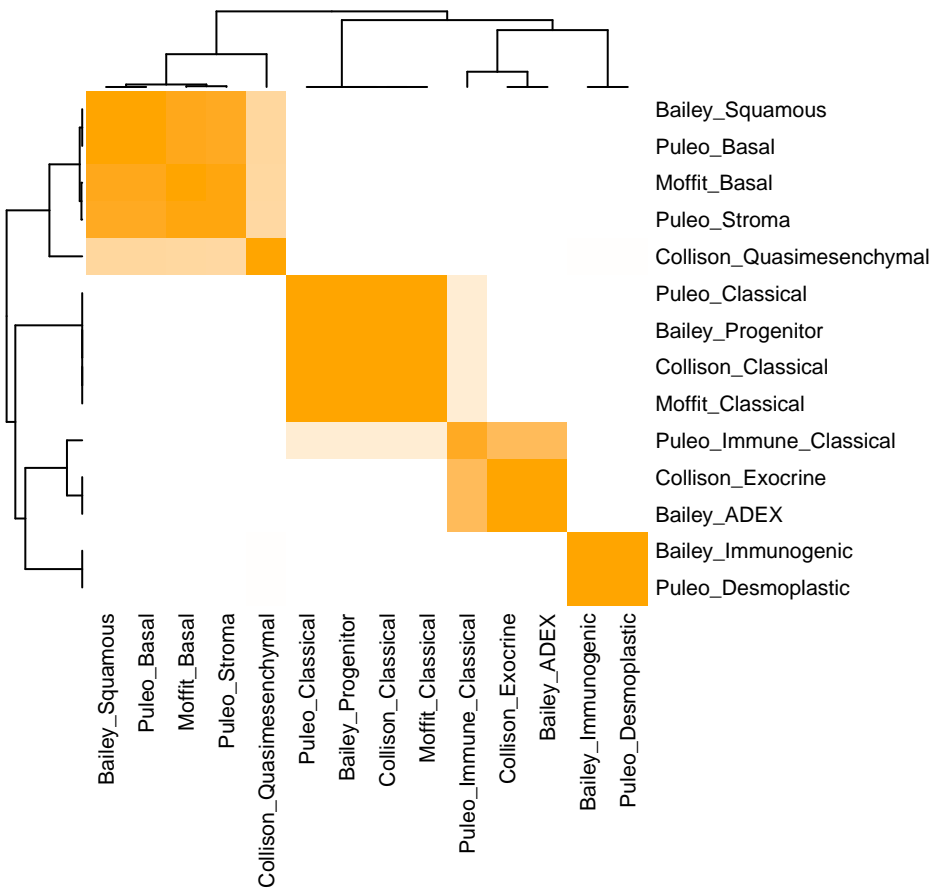
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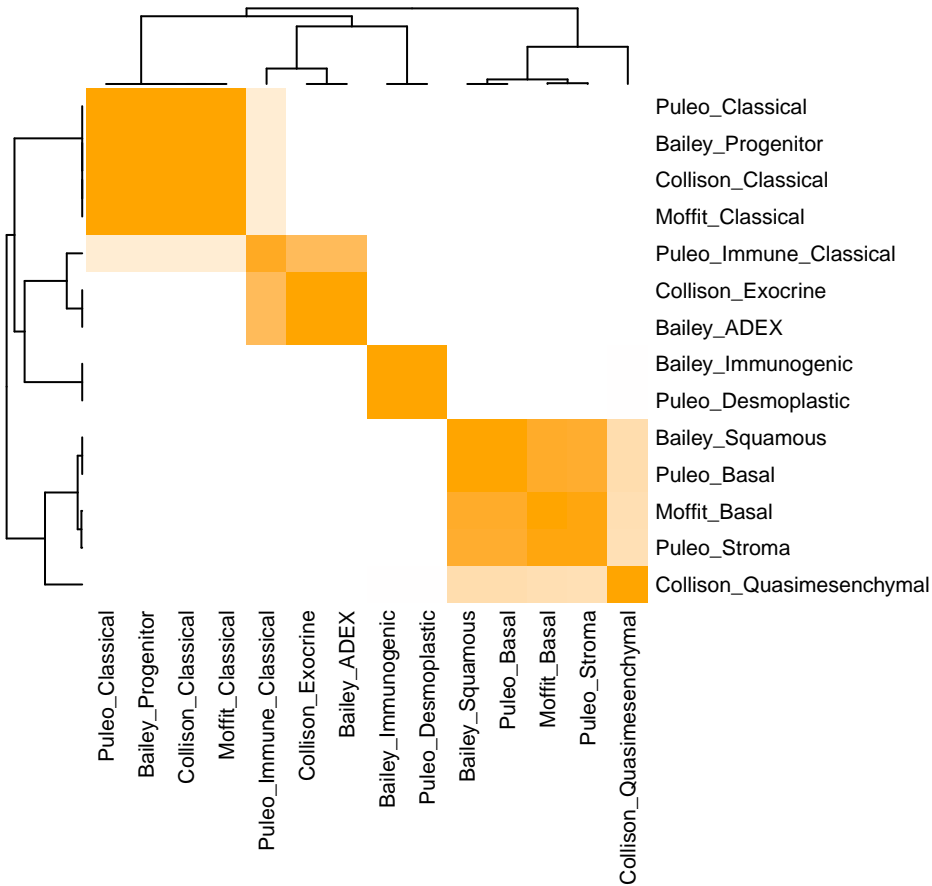
$$l = 5$$


$l = 6$

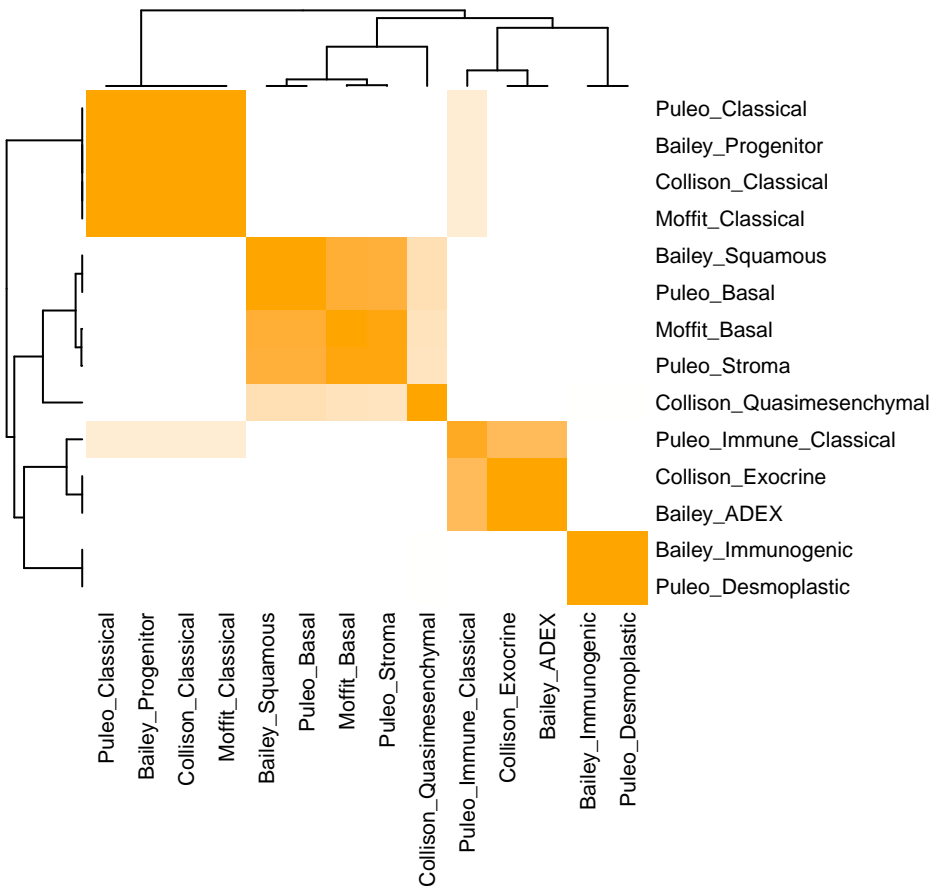


$l = 7$



$$l = 8$$


$l = 9$



[illegible]

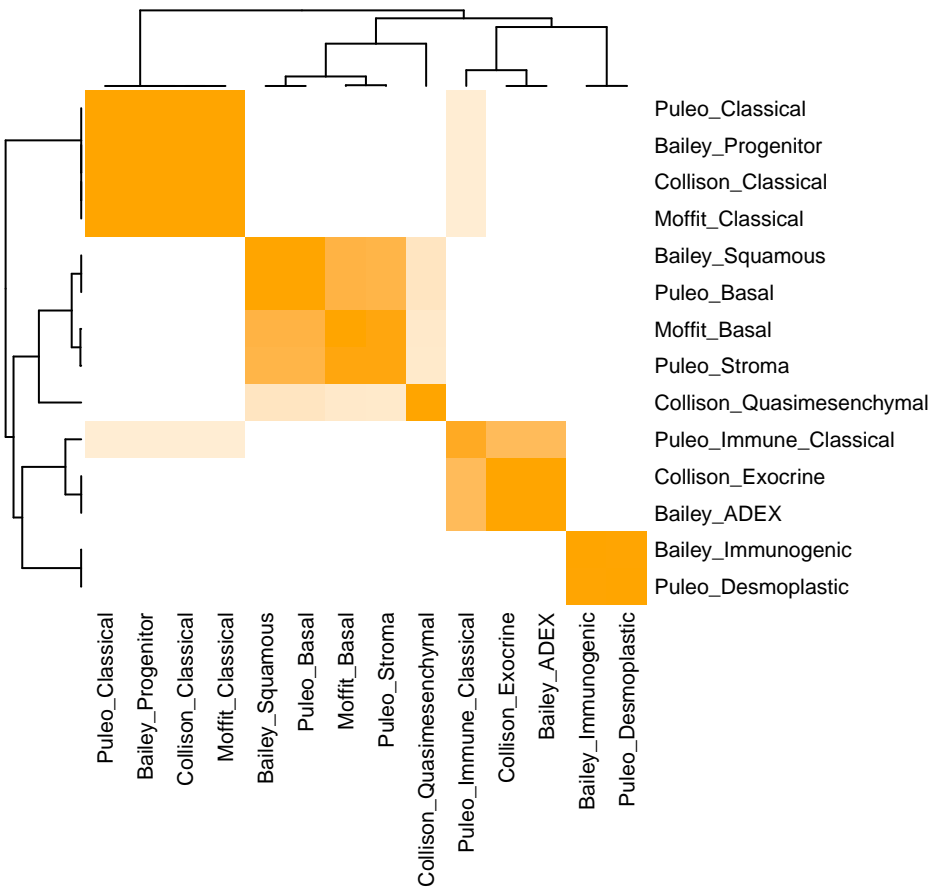
Puleo Desmoplastic

[illegible]

Puleo Desmoplastic

Puleo_Desmoplastic

I = 12



[illegible]

Puleo Desmoplastic

Heatmap visualization showing the relationship between 15 histological types of breast cancer, with dendrograms on the top and left indicating hierarchical clustering. The color scale ranges from white (0) to dark orange (1).

Y-axis labels (top to bottom):

- Puleo_Classical
- Bailey_Progenitor
- Collison_Classical
- Moffit_Classical
- Bailey_Squamous
- Puleo_Basal
- Moffit_Basal
- Puleo_Stroma
- Collison_Quasimesenchymal
- Puleo_Immune_Classical
- Collison_Exocrine
- Bailey_ADEX
- Bailey_Immunogenic
- Puleo_Desmoplastic

X-axis labels (left to right):

- Puleo_Classical
- Bailey_Progenitor
- Collison_Classical
- Moffit_Classical
- Bailey_Squamous
- Puleo_Basal
- Moffit_Basal
- Puleo_Stroma
- Collison_Quasimesenchymal
- Puleo_Immune_Classical
- Collison_Exocrine
- Bailey_ADEX
- Bailey_Immunogenic
- Puleo_Desmoplastic

Key observations from the heatmap:

- Strong self-similarity:** The diagonal is dark orange, indicating a value of 1 for all self-comparisons.
- High similarity within groups:**
 - Classical types (Puleo_Classical, Bailey_Progenitor, Collison_Classical, Moffit_Classical):** These four types show high similarity (orange) to each other.
 - Basal types (Puleo_Basal, Moffit_Basal):** These two types show high similarity to each other.
 - Immunogenic types (Bailey_Immunogenic, Puleo_Desmoplastic):** These two types show high similarity to each other.
- Low similarity between groups:** Types from different clusters (e.g., Classical vs. Basal, or Immunogenic vs. Classical) show low similarity (white or light orange).

Puleo_Desmoplastic

Heatmap visualization showing the relationship between 15 histological types of breast cancer, with dendrograms on the top and left indicating hierarchical clustering. The color scale ranges from white (0) to dark orange (1).

Y-axis (Rows) Histological Types:

- Puleo_Classical
- Bailey_Progenitor
- Collison_Classical
- Moffit_Classical
- Bailey_Squamous
- Puleo_Basal
- Moffit_Basal
- Puleo_Stroma
- Collison_Quasimesenchymal
- Puleo_Immune_Classical
- Collison_Exocrine
- Bailey_ADEX
- Bailey_Immunogenic
- Puleo_Desmoplastic

X-axis (Columns) Histological Types:

- Puleo_Classical
- Bailey_Progenitor
- Collison_Classical
- Moffit_Classical
- Bailey_Squamous
- Puleo_Basal
- Moffit_Basal
- Puleo_Stroma
- Collison_Quasimesenchymal
- Puleo_Immune_Classical
- Collison_Exocrine
- Bailey_ADEX
- Bailey_Immunogenic
- Puleo_Desmoplastic

The heatmap shows strong self-similarity (dark orange) along the diagonal. Key clusters include:

- A cluster of Puleo_Classical, Bailey_Progenitor, Collison_Classical, and Moffit_Classical.
- A cluster of Bailey_Squamous, Puleo_Basal, and Moffit_Basal.
- A cluster of Puleo_Immune_Classical and Collison_Exocrine.
- A cluster of Bailey_ADEX, Bailey_Immunogenic, and Puleo_Desmoplastic.

Puleo_Desmoplastic

Puleo_Desmoplastic