Pre-registration
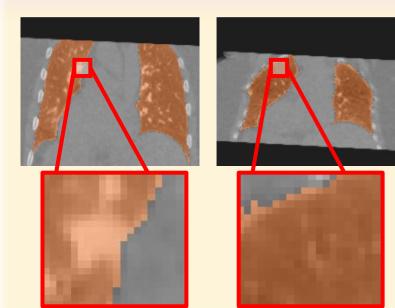
Target img   Source img

Discontinuous Deformable Registration

Residual Aligner based Network (RAN)

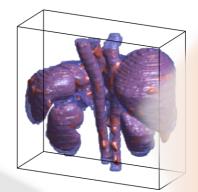Source img I^s

Displacement /Motion field ϕ

Target img I^t
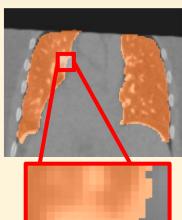
Aligned img $\phi(I^s)$

Backbone Structure for Feature Extraction

Previous FCN   **Motion-Separable FCN**

$q = 0$ $q = 3$ $q = 4$

Post-registration

Baseline   **RAN**