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Model of Vascular Desmoplastic Multispecies Tumor Growth

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Highlights

- Created four-species model to simulate interactions between tumor and stromal cells
- Cellular metabolic processes are simulated, including respiration and glycolysis
- Growth-factor releasing fibroblasts are key contributors to abnormal ECM remodeling
- An elastic energy is implemented to provide elasticity to the connective tissue
- ECM remodeling simulates stromal desmoplasia in pancreatic ductal adenocarcinoma

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