TABLE 1. Peritoneal metastatic cascade-molecular pathways.

Peritoneal metastatic cascade	Molecules/molecular path ways
Exfoliation from the tumour	Spontaneous cancer cell shedding E-cadherin N-cadherin EMT PC1 and PC2 Interstitial fluid pressure Intraoperative cancer seeding
Peritoneal transport	Mucinous ascites Actin microfilament system Lamellipodia, filopodia
Attachment to distant peritoneum	Trans-mesothelial dissemination ICAM-1, PECAM-1, VCAM-1 TNF-a, IL-1b, IFN-γ β1 integrin subunit CD43, CD44 Hyaluronan Translymphatic dissemination Lymphatic stomata Milky spots
Invasion in the subperitoneal space	Mesothelial cells rounding HGF/SF c-Met Destruction of the mesothelial monolayer Tumour-induced apoptosis Fas ligand/Fas Adherence to the basement membrane Integrines Peritoneal-blood barrier invasion MMP-1, MMP-2, MMP-7, MMP-9, MM-P13, MMP-14 TIMP-1, TIMP-2, TIMP-3, TIMP-4 uPA/uPAR plasminogen activator inhibitor-1 and -2
Proliferation and angiogenesis	Proliferation EGFR, EGF, TGFα IGF-1, IGF- Binding Protein-3 Angiogenesis HIF-1α , HIF-1β

Explanations: E-cadherin=epithelial cadherin, N-cadherin=neural cadherin, EMT=epithelial to mesenchyme transition, PC=polycystin, ICAM=intercellular adhesion molecule, PECAM=platelet endothelial adhesion molecule, VCAM=vascular adhesion molecule, TNF=tumour necrosis factor, IL=interleukin, INF=interferon, CD43=sialophorin, HGF=hepatocyte growth factor, SF=scatter factor, MMP=matrix metalloproteinases, TIMP=tissue inhibitor metalloproteinases, uPA=urokinase plasminogen activator, uPAR=urokinase plasminogen activator receptor, EGFR=epidermal growth factor receptor, EGF=epidermal growth factor, TGF=tumour growth factor, IGH=insulin-like growth factor, HIF=hypoxia inducible factor, VEGF=vascular endothelial growth factor, VEGFR=vascular endothelial factor receptor