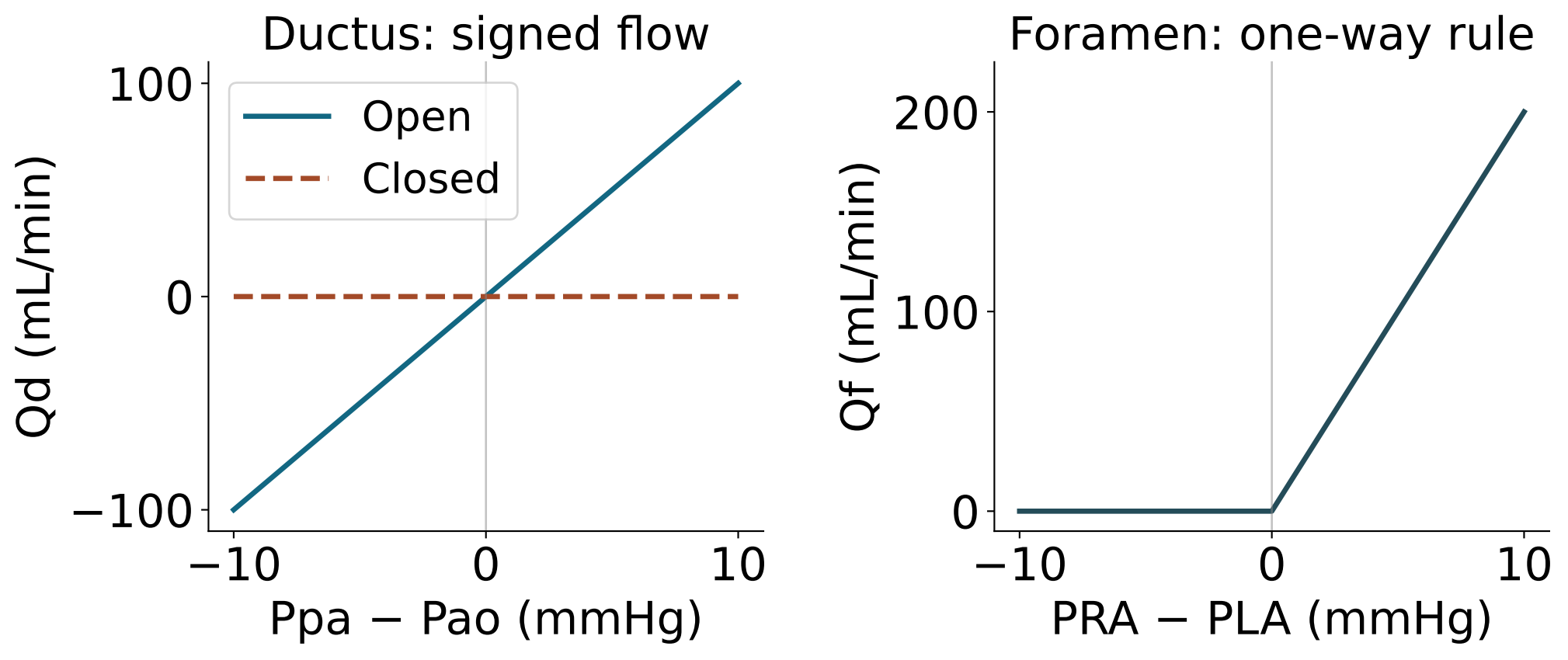

Ductus: signed flow
Qd (mL/min)
100
0
−100
Open
Closed
−10
0
10
Ppa − Pao (mmHg)
Foramen: one-way rule
Qf (mL/min)
200
100
0
−10
0
10
PRA − PLA (mmHg)