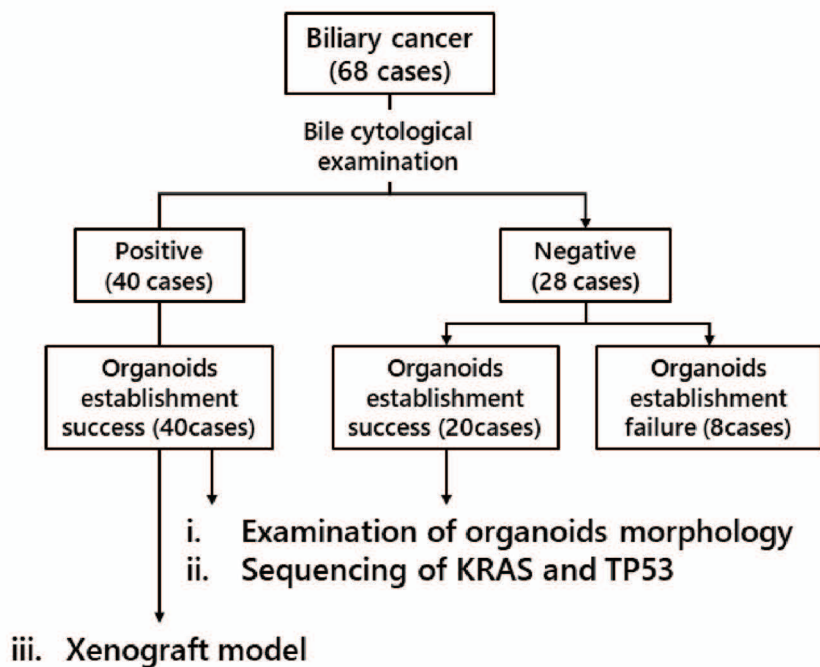
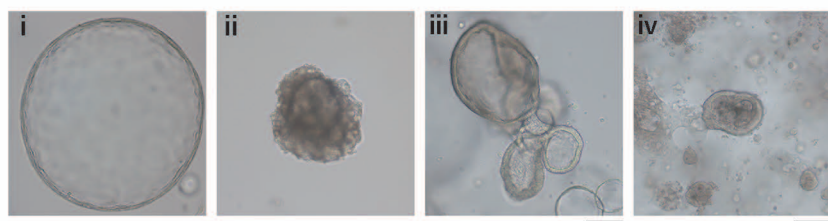


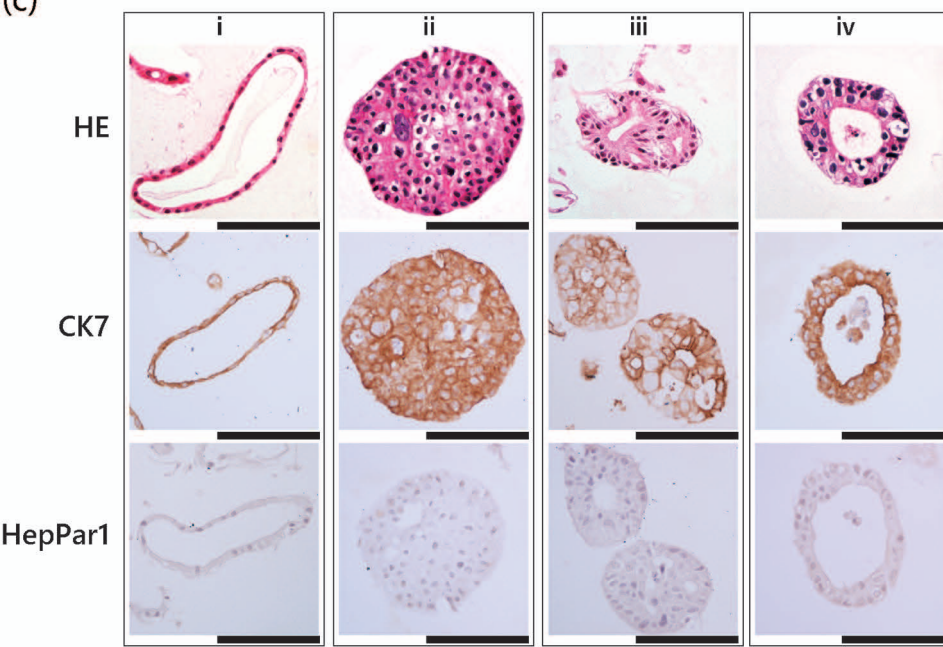
(a)

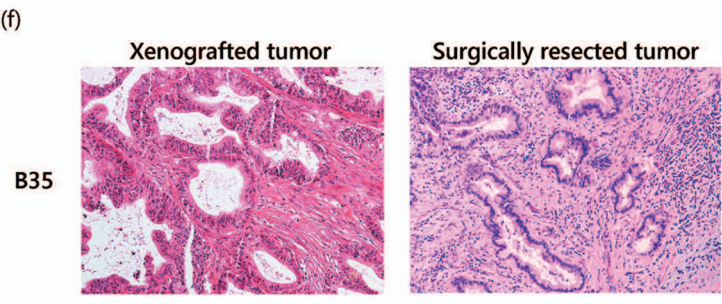
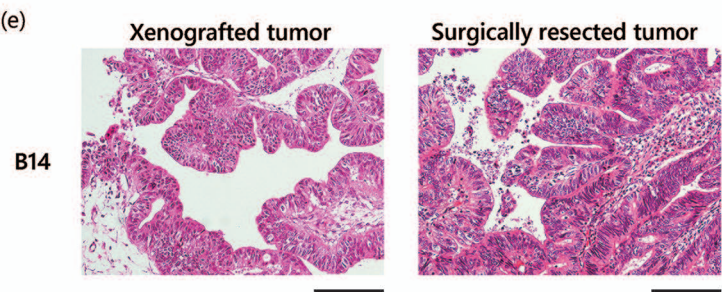
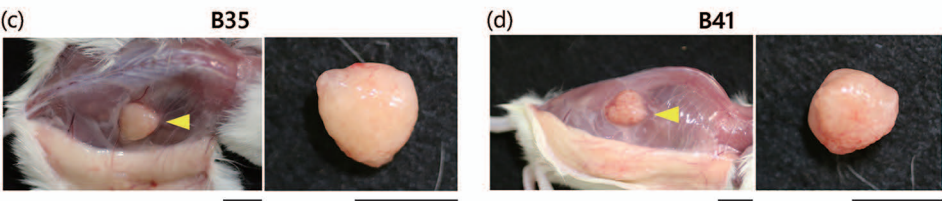
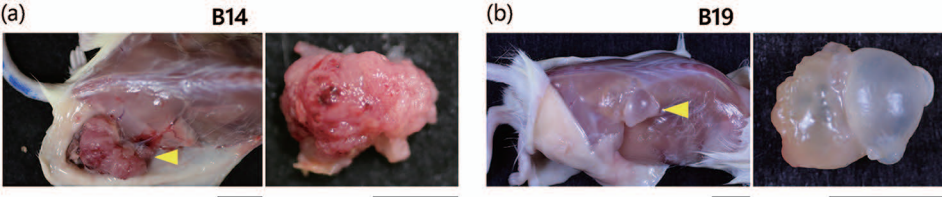


(b)

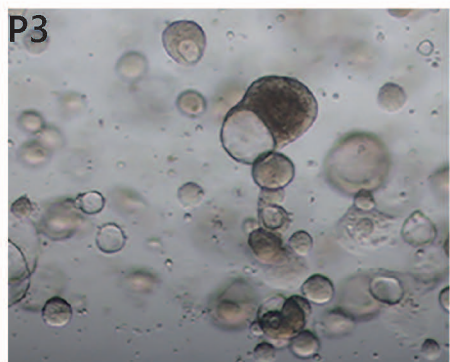
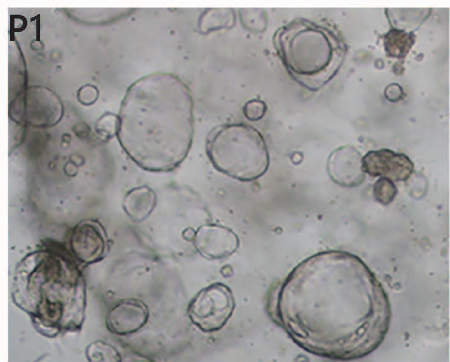
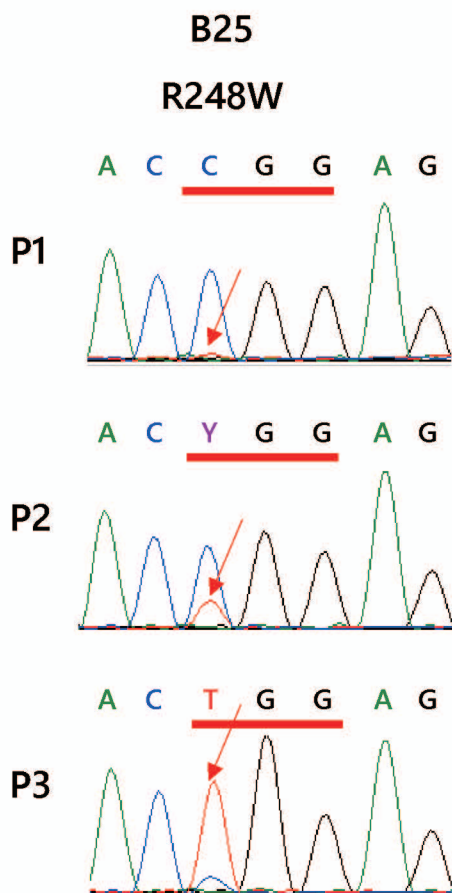


(c)

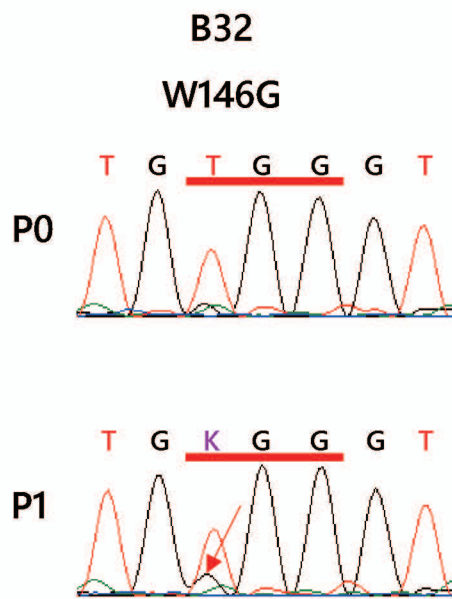


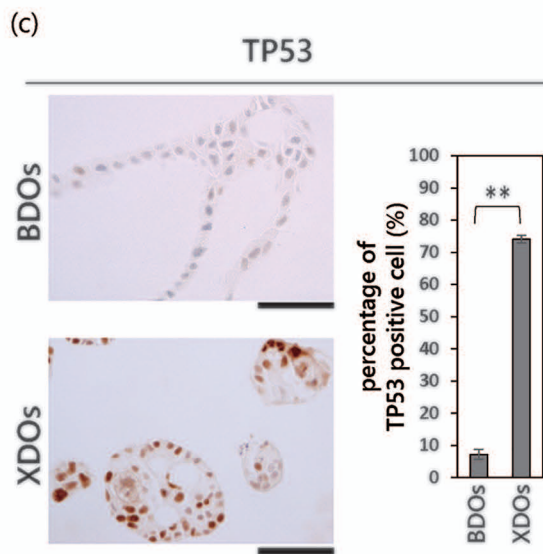
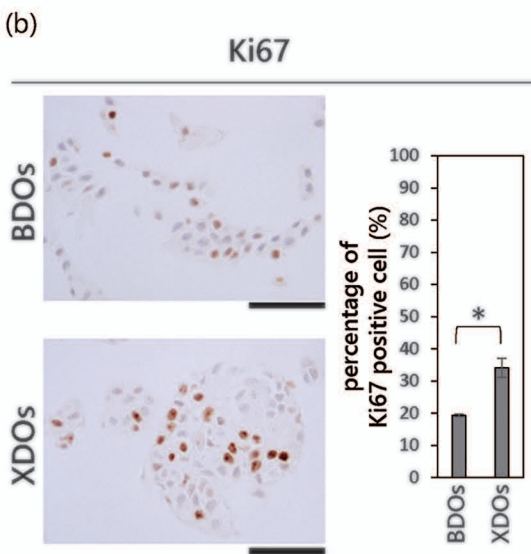
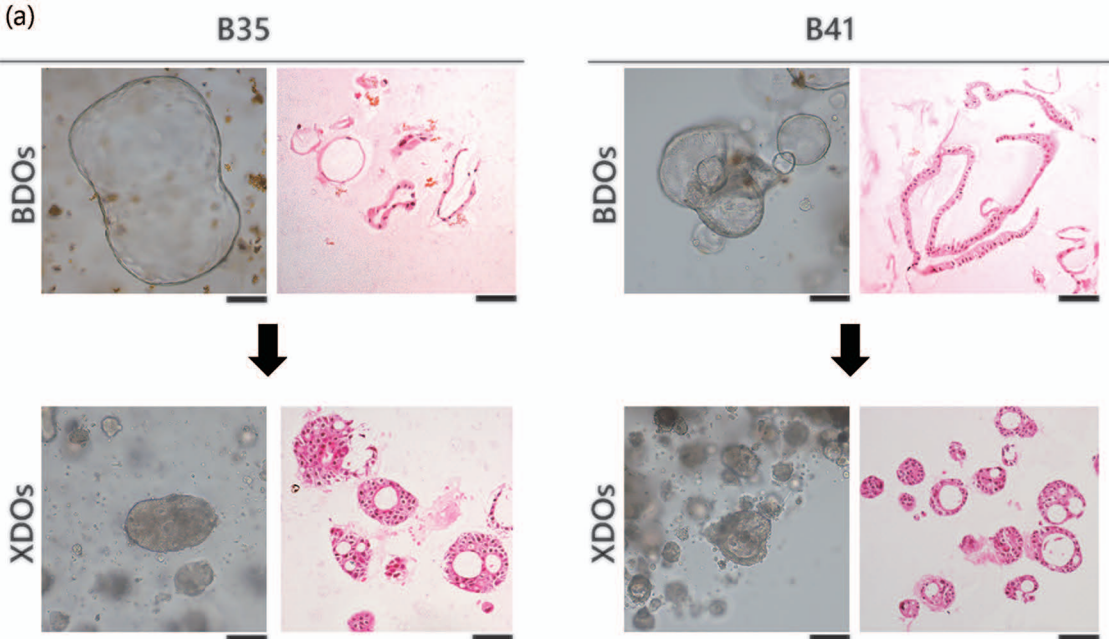


(a)

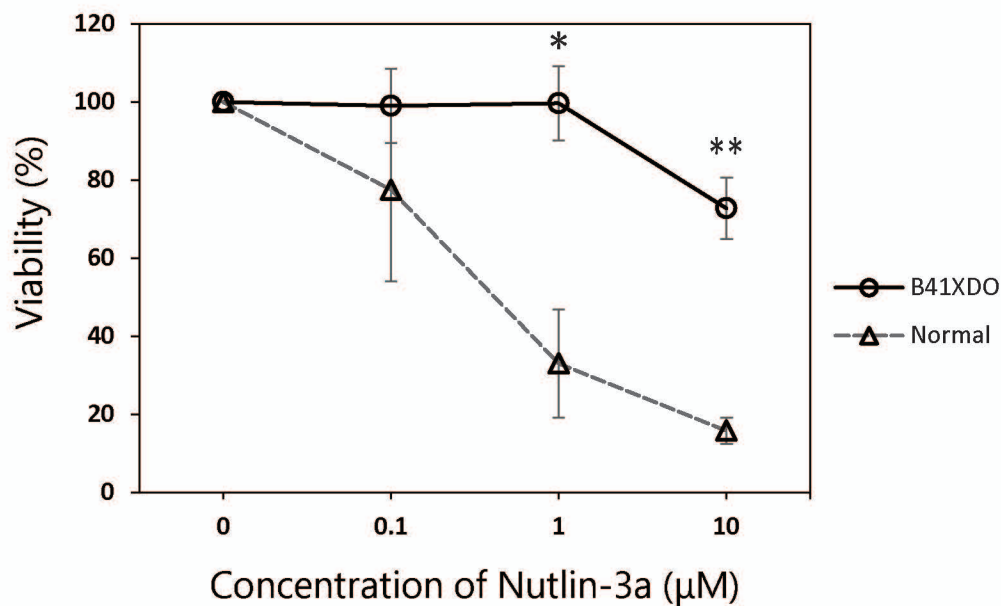


(b)

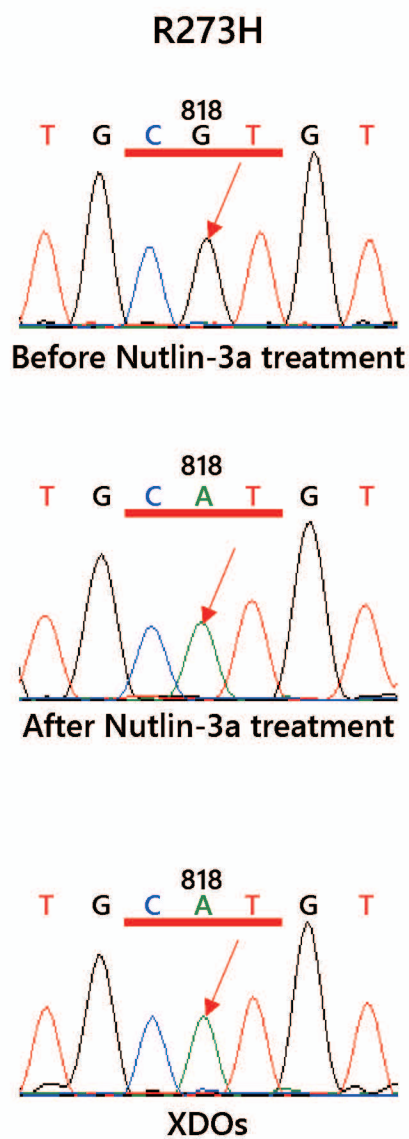




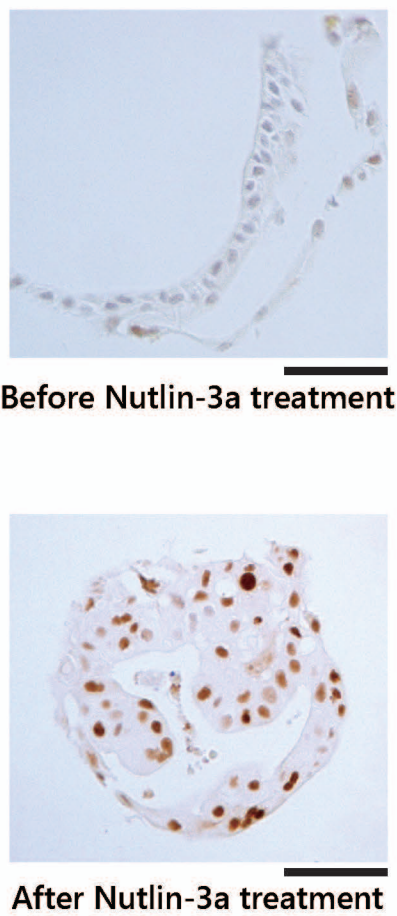
(a)



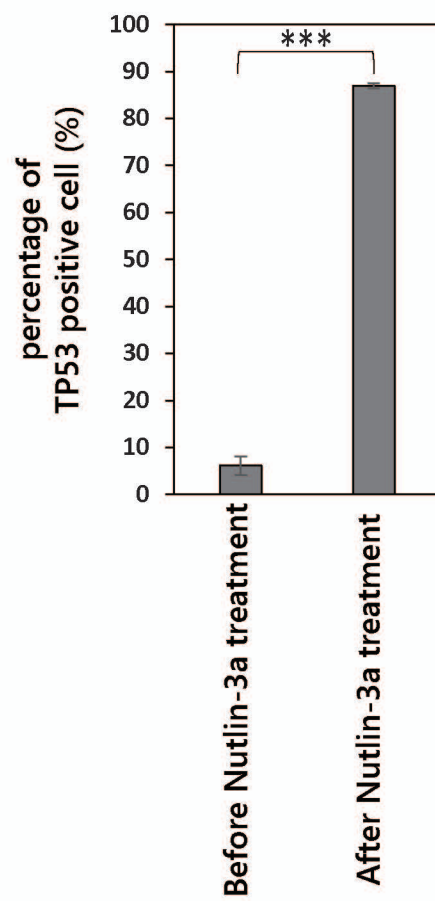
(b)

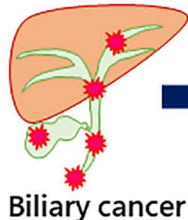


(c)



(d)





Biliary cancer



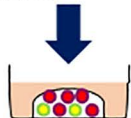
ERCP



bile

Collected over time

Recurrence case
or
chemo resistance case

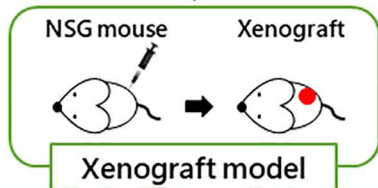


BDOs

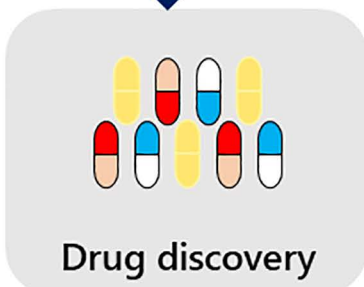
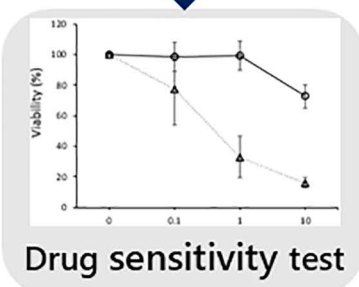
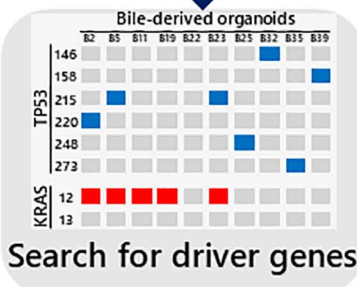
Repeated passages



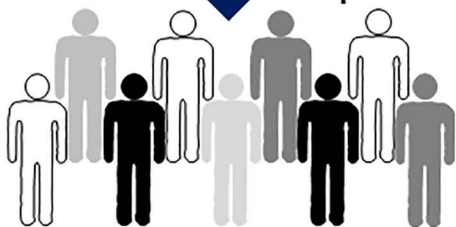
Added Nutlin-3a



Xenograft model



Feedback to patients



Personalized medicine