



# ROC curves

**Receiver Operating Characteristic Curves** 

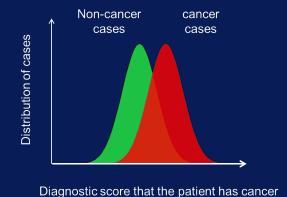
Brandon D. Gallas, PhD

FDA: Food and Drug Administration

CDRH: Center for Devices and Radiological Health

OSEL: Office of Science and Engineering Laboratories

DIDSR: Division of Imaging, Diagnostics and Software Reliability





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Brandon D. Gallas, PhD

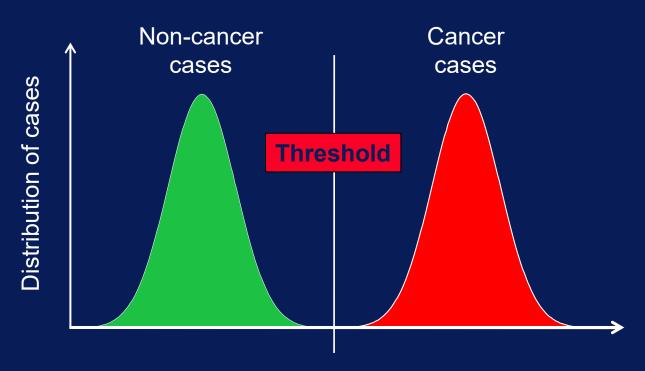
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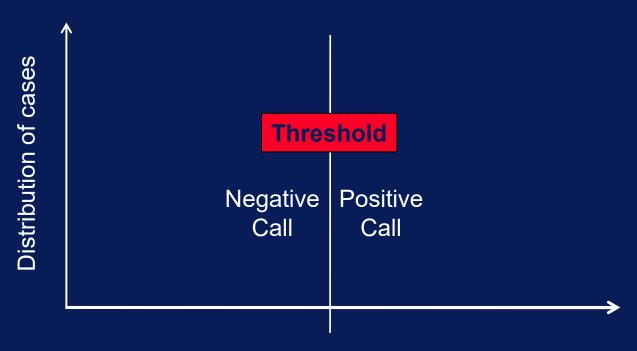
DIDSR: Division of Imaging, Diagnostics and Software Reliability





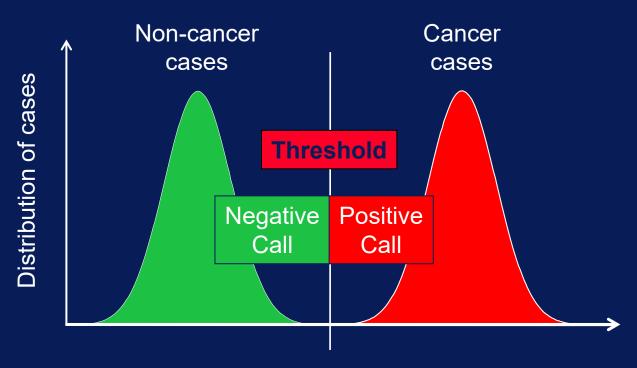
Diagnostic score that the patient has cancer





Diagnostic score that the patient has cancer

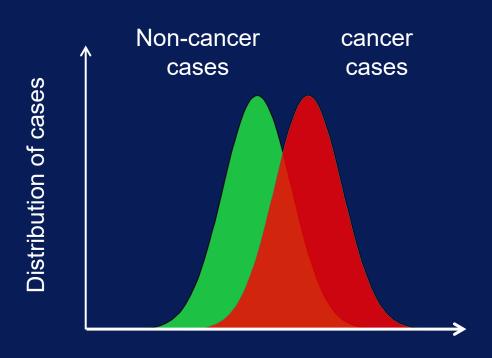




Diagnostic score that the patient has cancer

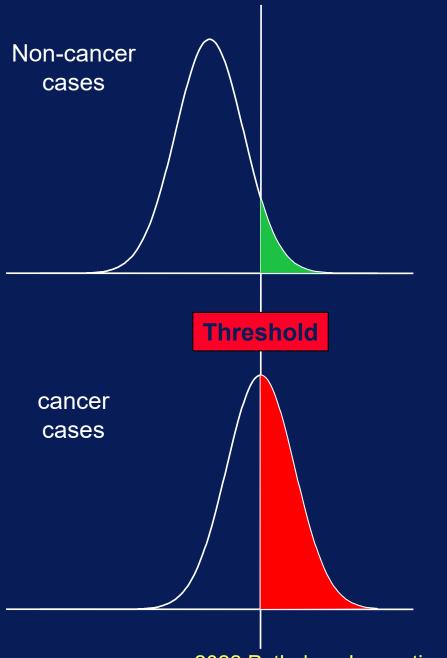
# More typically:



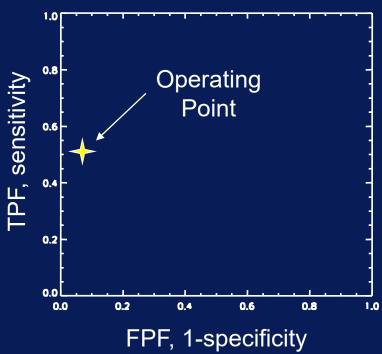


Diagnostic score that the patient has cancer

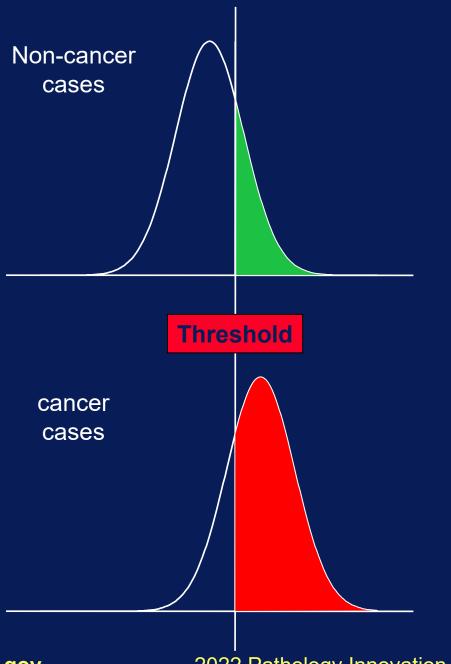




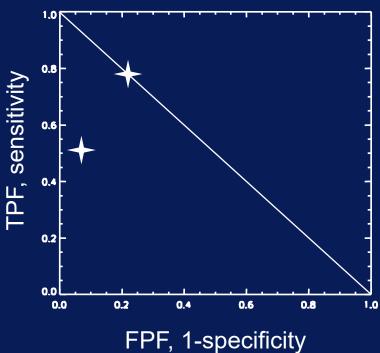
## **ROC Space**



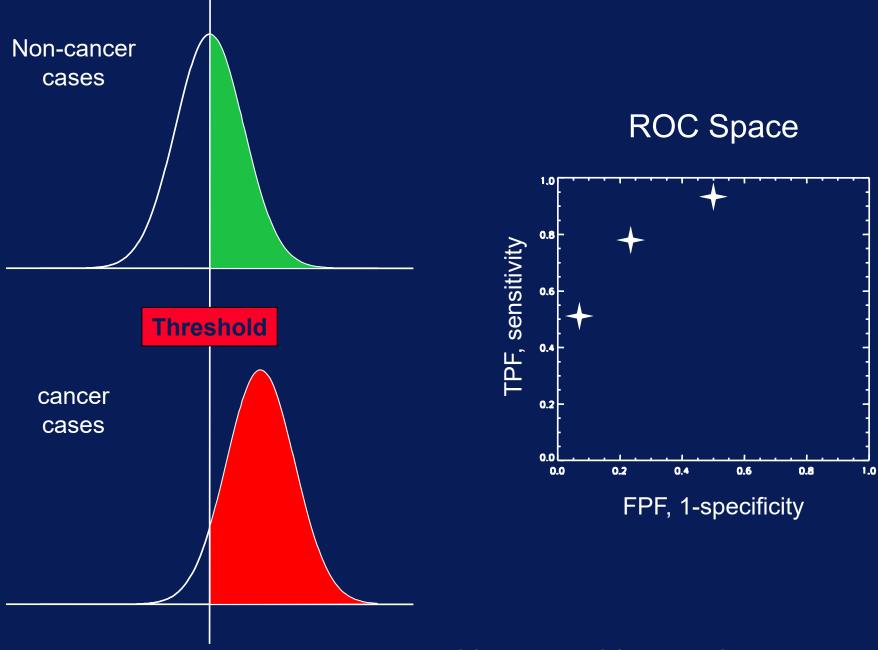




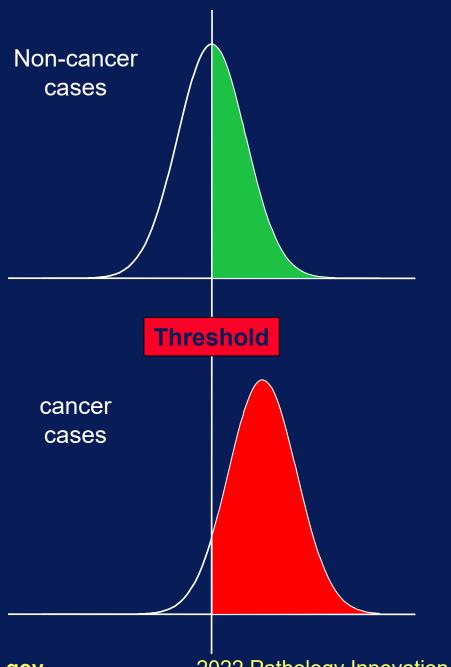
# **ROC Space**



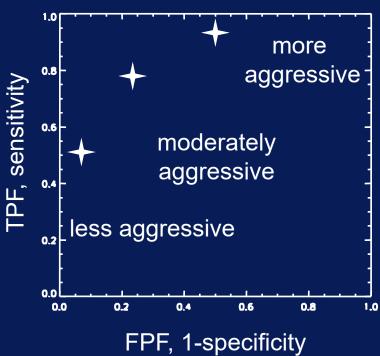




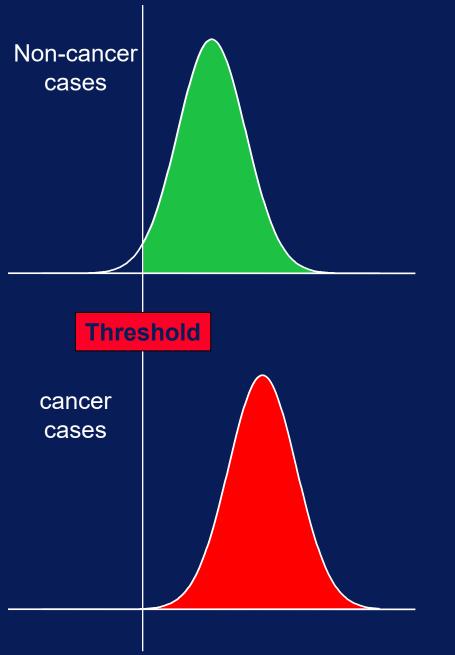




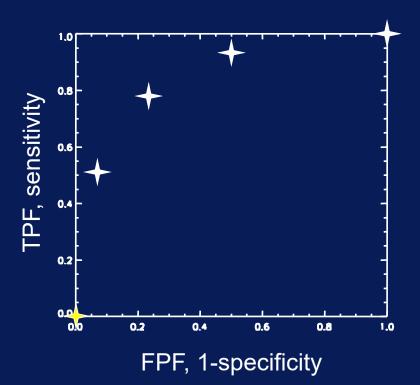
### **ROC Space**







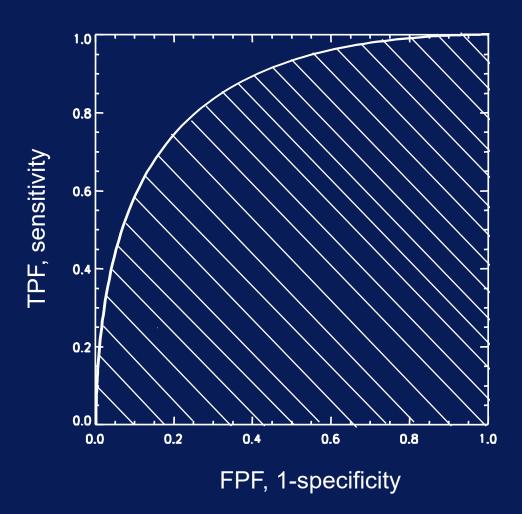
#### **Entire ROC Curve**



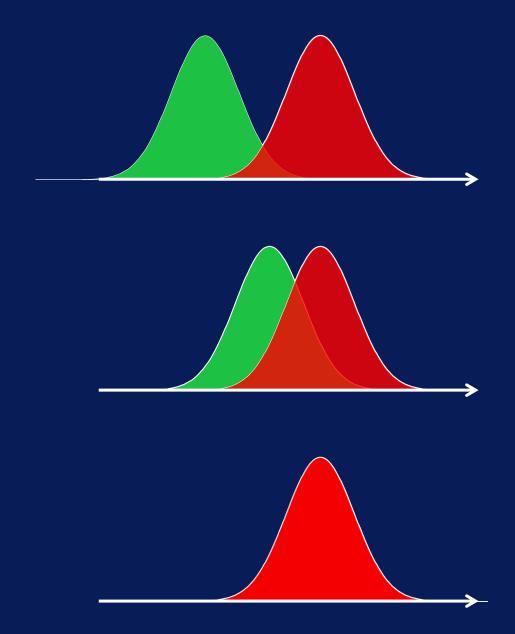




Diagnostic capacity of the diagnostic score







### Entire ROC curve

