Figure S1. Appendix used as an external control for anaplastic lymphoma kinase immunohistochemistry analysis. Staining is observed in the ganglion cells of the myenteric plexus and dispersed axons, while no staining is visible in the smooth muscle cells or epithelium.
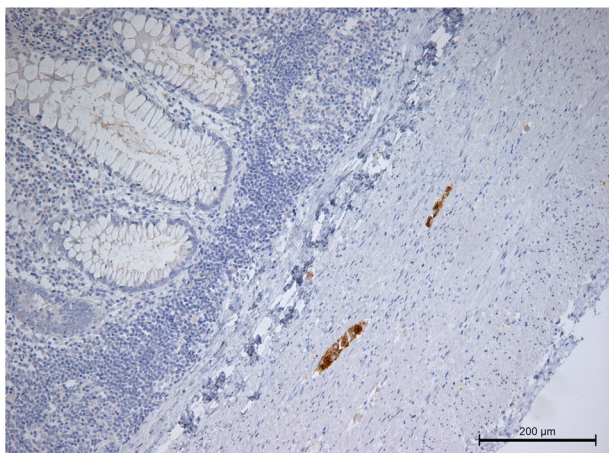
Figure S2. Data split of K-nearest neighborsclassification (epidermal growth factor receptorvs. negative group).

| Train and validation: 59 | Test: 14 | Total: 73 |

Figure S3. Receiver operating characteristiccurves plot for classifier performance (EGFR vs. TN). EGFR, epidermal growth factor receptor; TN, negative group.
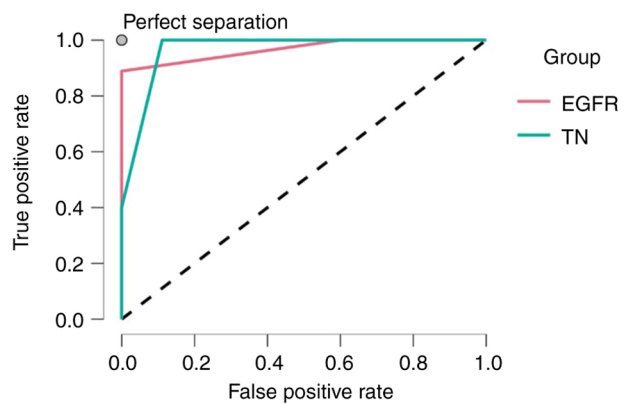
Figure S4. Data split of K-nearest neighborsclassification (anaplastic lymphoma kinase vs. negative group).

| Train and validation: 48 | Test: 11 | Total: 59 |

Figure S5. Receiver operating characteristiccurves plot for classifier performance (ALK vs.TN). ALK, anaplastic lymphoma kinase; TN, negative group.
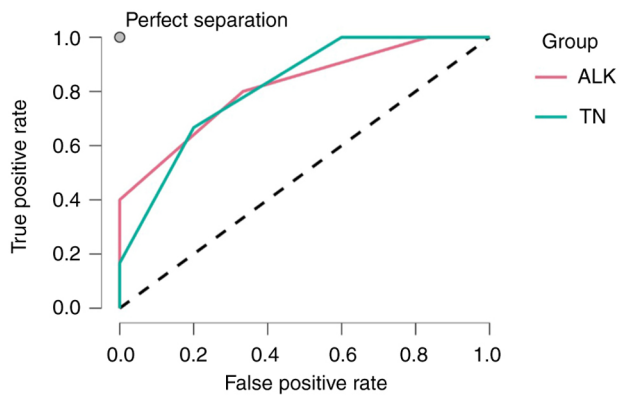
Figure S6. Data split of K-nearest neighborsclassification (anaplastic lymphoma kinase vs. epidermal growth factor receptor).

| Train and validation: 56 | Test: 14 | Total: 70 |

Figure S7. Receiver operating characteristiccurves plot for classifier performance (ALK vs. EGFR). ALK, anaplastic lymphoma kinase; EGFR, epidermal growth factor receptor.