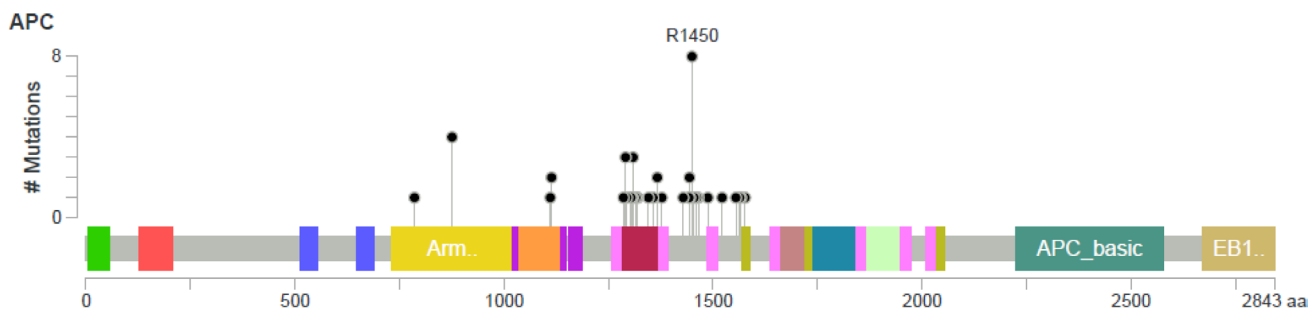


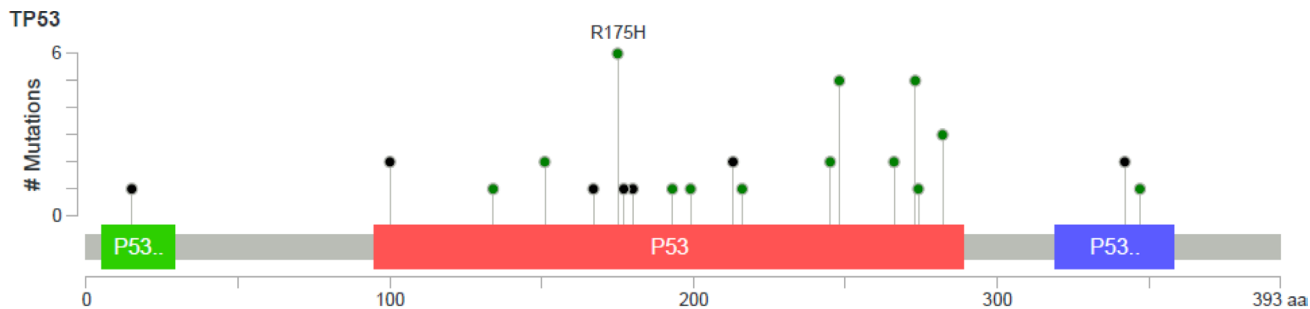
# Differential clinicopathological and molecular features within late-onset colorectal cancer according to tumor location

## SUPPLEMENTARY MATERIALS



Green circle: Missense mutations. Black circle: Nonsense.

Supplementary Figure 1: Lollipop plot for APC mutations.



Green circle: Missense mutations. Black circle: Nonsense.

Supplementary Figure 2: Lollipop plot for TP53 mutations.

**Supplementary Table 1: Most frequent altered chromosomal regions for each late-onset CRC location. See\_Supplementary Table\_1**

**Supplementary Table 2: Pathogenic mutations according to the tumor location**

Genes mutations	Late-onset CRC n/Global (%)	Right Colon n/Global (%)	Left Colon n/Global (%)	Rectum n/Global (%)	<i>p</i> ( $\chi^2$ )
<b>KRAS</b>	50/86 (58)	22/30 (73)	6/21 (29)	22/35 (63)	<b>0.005</b>
<b>APC</b>	43/86 (50)	16/30 (53)	7/21 (33)	20/35 (57)	NS
<b>p53</b>	39/86 (45)	12/30 (40)	9/21 (43)	18/35 (51)	NS
<b>PIK3CA</b>	16/86 (19)	10/30 (33)	3/21 (14)	3/35 (9)	<b>0.03</b>
<b>SMAD4</b>	8/86 (9)	1/30 (3)	1/21 (5)	6/35 (17)	NS
<b>FBXW7</b>	7/86 (8)	1/30 (3)	2/21 (10)	4/35 (11)	NS
<b>NRAS</b>	6/86 (7)	2/30 (7)	1/21 (5)	3/35 (9)	NS
<b>GNAS</b>	6/86 (7)	4/30 (13)	0	2/35 (6)	NS
<b>BRAF</b>	6/86 (7)	3/30 (10)	1/21 (5)	2/35 (6)	NS
<b>CDKN2A</b>	3/86 (3)	1/30 (3)	0	2/35 (6)	NS
<b>PTEN</b>	2/86 (2)	1/30 (3)	0	1/35 (3)	NS
<b>Genes with only one location with mutated cases:</b>					NS
<b>IDH2</b>	1/86 (1)	0	0	1/35 (3)	
<b>CTNNB1</b>	2/86 (2)	2/30 (7)	0	0	
<b>SMARCB1</b>	1/86 (1)	0	0	1/35 (3)	
<b>KDR</b>	2/86 (2)	2/30 (7)	0	0	
<b>CDH1</b>	1/86 (1)	1/30 (3)	0	0	
<b>MPL</b>	1/86 (1)	1/30 (3)	0	0	
<b>GNAQ</b>	1/86 (1)	0	0	1/35 (3)	
<b>GNA11</b>	1/86 (1)	0	1/21 (5)	0	

Other genes without pathogenic mutations: *AKT1, FGFR3, KIT, RBI, VHL, ERBB4, ATM, FGFR2, HNF1A, NOTCH1, SMO, HRAS, RET, STK11.*

LOCRC: Late-onset Colorectal Cancer. CRC: Colorectal Cancer.

**Supplementary Table 3: Most frequent altered chromosomal regions for right colon cancers and the correlative cancer genes codified within. See\_Supplementary Table\_3**

**Supplementary Table 4: Most frequent altered chromosomal regions for left colon cancers and the correlative cancer genes codified within. See\_Supplementary Table\_4**

**Supplementary Table 5: Most frequent altered chromosomal regions for rectal cancers and the correlative cancer genes codified within. See\_Supplementary Table\_5**