

## APPENDIX

Using the nomogram for OS in Figure 1A, an example patient's predictions may be obtained from a single nomogram as follows. First, risk points associated with each variable are obtained via vertical translation of the patient's variable value (e.g., BRAF) to the scale labeled "Points" in the nomogram (i.e., BRAF MT status contributes approximately 29 points to risk of death). Next, the points associated with each variable value for the patient are totaled across the variables. This total is then located on the scale "Total Points" and then vertically mapped to obtain the prediction of interest (e.g., 140 Total Points maps to a 1-Year OS probability of approximately 69%). Instructions also apply to the PFS nomogram in Figure 1B.

**Supplemental Table 1.** ARCAD trials used for nomogram construction and validation.

<b>Trial</b>	<b>Years Accrued</b>	<b>First Line Treatment Arms</b>	<b>N</b>
<b>03-TTD-01</b>	2002-2004	FUOX vs. CAPOX	342
<b>AGITG (MAX)</b>	2005-2007	Capecitabine vs. capecitabine + bevacizumab vs. capecitabine + bevacizumab + mitomycin	471
<b>AIO22</b>	2002-2004	FUFOX vs. CAPOX	470
<b>AVF2107g</b>	2000-2002	IFL vs. IFL + bevacizumab	923
<b>AVF2192g</b>	2000-2002	5-FU vs. 5-FU + bevacizumab	209
<b>BICC-C</b>	2003-2004	mIFL +/- bevacizumab vs. FOLFIRI +/- bevacizumab vs. CapIRI	532
<b>C97-3</b>	1997-1999	FOLFOX6 vs. FOLFIRI	220
<b>CAIRO</b>	2003-2004	Capecitabine vs. CapIRI	820
<b>CAIRO2</b>	2005-2006	CAPOX + bevacizumab vs. CAPOX + bevacizumab + cetuximab	746
<b>COIN</b>	2005-2008	FOLFOX vs. FOLFOX + cetuximab vs. intermittent FOLFOX	2,418
<b>CRYSTAL</b>	2004-2005	FOLFIRI + cetuximab vs. FOLFIRI	1,217
<b>FIRE II (CIOX)</b>	2004-2006	XELOX + cetuximab vs. CapIRI + cetuximab	177
<b>FIRE III</b>	2007-2012	FOLFIRI + bevacizumab vs. FOLFIRI + cetuximab	592
<b>FOCUS</b>	2000-2003	5-FU vs. 5-FU + oxaliplatin vs. 5-FU + irinotecan	2,103
<b>FOCUS II</b>	2004-2006	5-FU vs. FOLFOX vs. capecitabine vs. CAPOX	397
<b>GONO</b>	2001-2005	FOLFOXIRI vs. FOLFIRI	244
<b>HORG 99.30</b>	2000-2004	FOLFOXIRI vs. FOLFIRI	283
<b>HORIZON II</b>	2006-2010	FOLFOX + CAPOX + cediranib vs. FOLFOX + CAPOX	1,076
<b>HORIZON III</b>	2006-2009	FOLFOX + cediranib vs. FOLFOX + bevacizumab	1,601
<b>MACRO</b>	2006-2008	XELOX + bevacizumab vs. bevacizumab	476
<b>N016966</b>	2004-2005	FOLFOX + CAPOX + bevacizumab vs. FOLFOX + CAPOX	2,034
<b>N9741</b>	1999-2001	IFL vs. FOLFOX vs. IROX	1,416
<b>OPTIMOX 1</b>	2000-2002	FOLFOX4 vs. FOLFOX7	621
<b>OPTIMOX 2</b>	2004-2006	mFOLFOX7 vs. mFOLFOX7	202
<b>OPUS</b>	2005-2006	FOLFOX4 vs. FOLFOX4 + cetuximab	340
<b>PACCE (C249)</b>	2005-2006	Chemotherapy + bevacizumab vs. Chemotherapy + bevacizumab + panitumumab	1,053
<b>PRIME (C203)</b>	2006-2008	FOLFOX vs. FOLFOX + panitumumab	1,183
<b>TRIBE</b>	2008-2011	FOLFIRI + bevacizumab vs. FOLFOXIRI + bevacizumab	508
<b>Total ARCAD</b>			<b>22,674</b>

Abbreviations: AGITG, Australasian Gastro-Intestinal Trials Group; AIO, Arbeitsgemeinschaft Internistische Onkologie; ARCAD, Aide et Recherche en Cancérologie Digestive; AVF, anastomotic-vaginal fistula; BICC, Breast Cancer in City and Country; CAIRO, Capecitabine, Irinotecan, and Oxaliplatin in Advanced Colorectal Cancer; CapIRI, capecitabine and irinotecan; CAPOX, capecitabine plus oxaliplatin; FOCUS, Fluorouracil, Oxaliplatin, and CPT11 Use and Sequencing; FOLFIRI, fluorouracil, leucovorin, and irinotecan; FOLFOX, fluorouracil, leucovorin, and oxaliplatin; FU, fluorouracil; FUFOX, fluorouracil plus oxaliplatin; FUOX, continuous-infusion high-dose fluorouracil (FU) plus oxaliplatin; GONO, Gruppo Oncologico Nord Ovest; HORG, Hellenic Oncology Research Group; IFL, irinotecan, leucovorin, and fluorouracil; IROX, irinotecan and oxaliplatin; m, modified; MACRO, Maintenance in Colorectal Cancer; PACCE, Panitumumab Advanced Colorectal Cancer Evaluation; XELOX, capecitabine plus oxaliplatin; 5-FU, fluorouracil and leucovorin.