

Workshop logistics

- Interactive application (60 minutes)
- Discussion and Q&A (10-15 minutes)
- Wrap-up (5-minutes)



Interactive application

- Zoom breakout rooms
 - Groups of 6-10 individuals will be randomly assigned
 - There will be two break-outs of 10-minutes each
- Google slides
 - Will be used to allow break-out groups to record responses during discussion
 - Assign a scribe to record responses/discussion
 - Link here:
<https://docs.google.com/presentation/d/1hTequBliVuTIVQ14BFZ31IjZxlywDFv1Bsx1Y8jxcbQ/edit?usp=sharing>



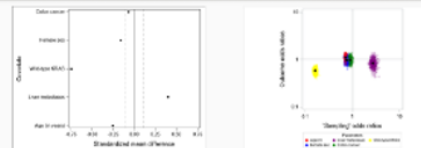
Google Slides

An introduction to transporting treatment effects from randomized clinical trials to clinical practice

Society for Epidemiologic Research Workshop
Friday, January 8, 2021

1

Break-out prompt #1



Use the Love and VITT plots above to answer the follow-up questions on the break-out group slides about variable selection.

2

Break-out Group #1

Question 1: What variables seem most important for inclusion in the adjustment set?

Question 2: Which variables seem least important?

Question 3: Are there any variables you would consider dropping completely?

3

Break-out Group #2

Question 1: What variables seem most important for inclusion in the adjustment set?

Question 2: Which variables seem least important?

Question 3: Are there any variables you would consider dropping completely?

Break-out Group #3

Question 1: What variables seem most important for inclusion in the adjustment set?

Question 2: Which variables seem least important?

Question 3: Are there any variables you would consider dropping completely?

Break-out Group #4

Question 1: What variables seem most important for inclusion in the adjustment set?

Question 2: Which variables seem least important?

Question 3: Are there any variables you would consider dropping completely?

Activate V



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Programs and course content

- All materials for the workshop are available on the following GitHub site:
<https://github.com/tonymatthews/transportability-workshop>
- Please note: we cannot store the datasets on the GitHub site, as they require approval for use (see Word doc about how to obtain trial data access, if desired)



Questions?

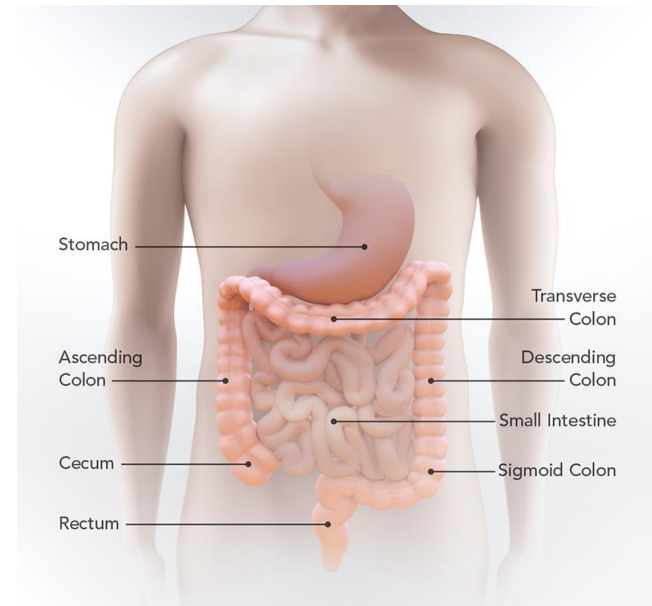


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Workshop example and clinical context

Example: Metastatic Colorectal Cancer

- Colorectal cancer (CRC) is the third most common cancer in US men and women
- About 22% are diagnosed when they have already metastasized (mCRC)
- Prognosis is poor in mCRC with a 5-year survival rate of 14%



Randomized, Phase III Trial of Panitumumab With
Infusional Fluorouracil, Leucovorin, and Oxaliplatin
(FOLFOX4) Versus FOLFOX4 Alone As First-Line
Treatment in Patients With Previously Untreated Metastatic—
Colorectal Cancer: The PRIME Study

VOLUME 28 • NUMBER 31 • NOVEMBER 1 2010

JOURNAL OF CLINICAL ONCOLOGY

- Open-label, phase III, multi-center trial comparing the efficacy of panitumimab + FOLFOX4 versus FOLFOX4 alone
- Panitumimab is a monoclonal antibody therapy targeting the epidermal growth factor receptor (EGFR), shown to be a clinically meaningful target for mCRC
- FOLFOX4 is an infused chemotherapy regimen including a combination of oxaliplatin and 5-fluorouracil, and was standard of care for mCRC at the time of this trial



The role of KRAS in panitumumab efficacy

- An earlier pivotal phase III study of panitumumab as monotherapy in the mCRC setting provided evidence that clinical benefit was specific to patients with wild-type (WT) KRAS tumors.
- The PRIME study was designed to compare the treatment effect in **all patients** but was amended to focus on prospective hypothesis testing in the WT KRAS stratum.
- KRAS testing was initiated after the study population was enrolled.

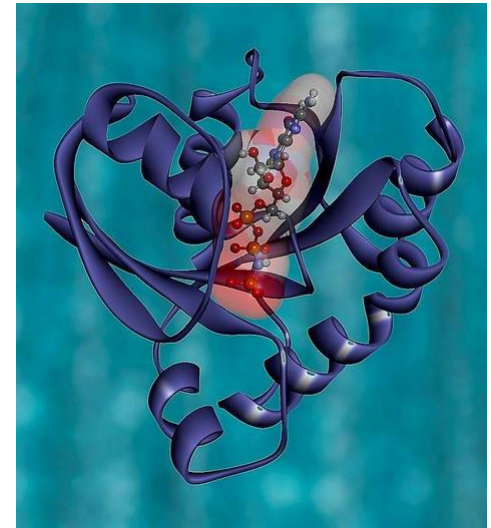
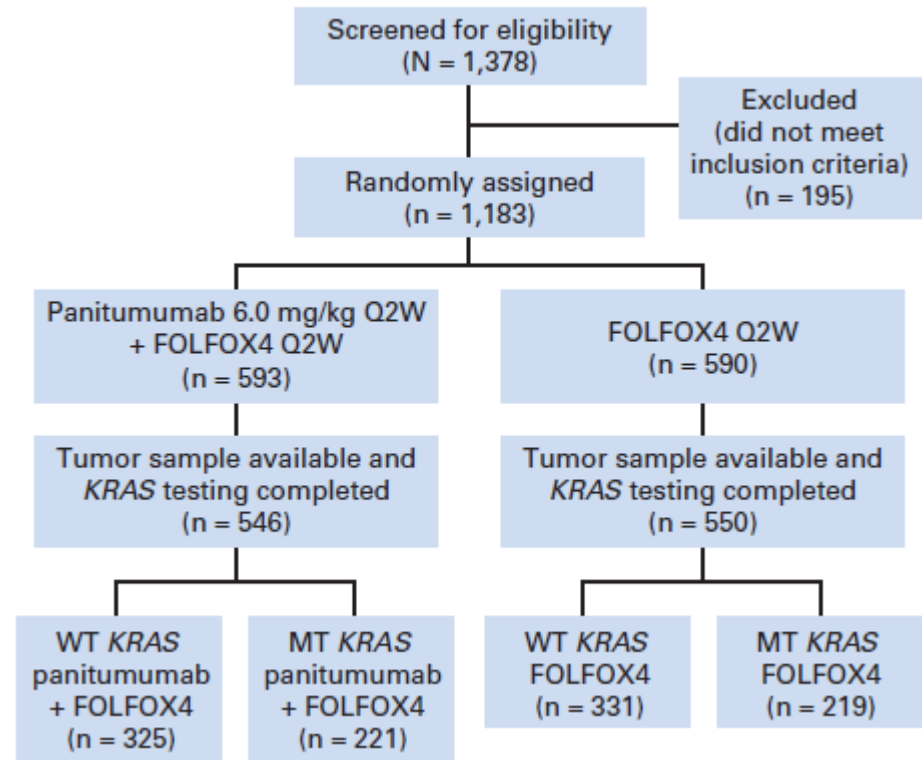


Illustration of the KRAS protein. Image credit: National Institutes of Health



PRIME Study Eligibility Criteria

- 18+ years old
- Untreated metastatic colon or rectal cancer
- ECOG performance status (physical function): 0-2
- One measurable lesion



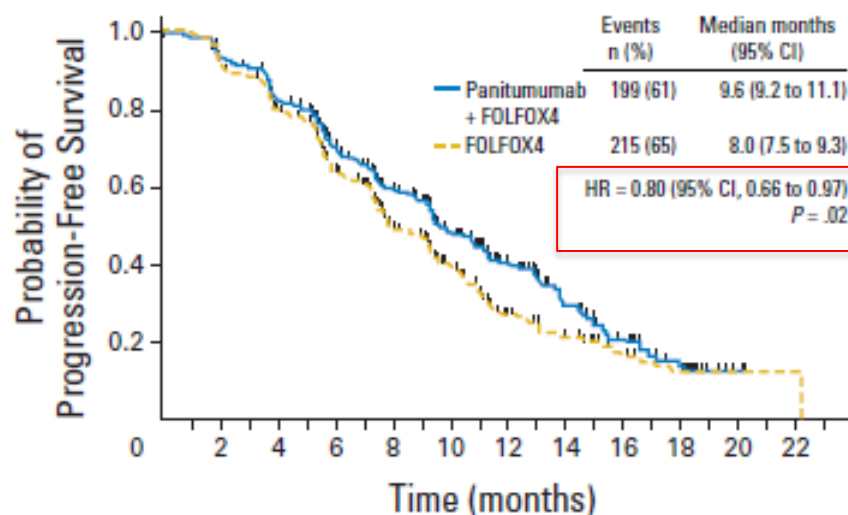
The PRIME study population

- 1183 patients were randomized from Aug 2006-Feb 2008
- See trial Table 1
 - Average age \approx 62 years
 - 60% had WT KRAS; 40% had mutant KRAS
 - Trial conducted primarily in Western Europe, Canada, and Australia (not the US)
 - 66% had colon cancer; 34% had rectal cancer

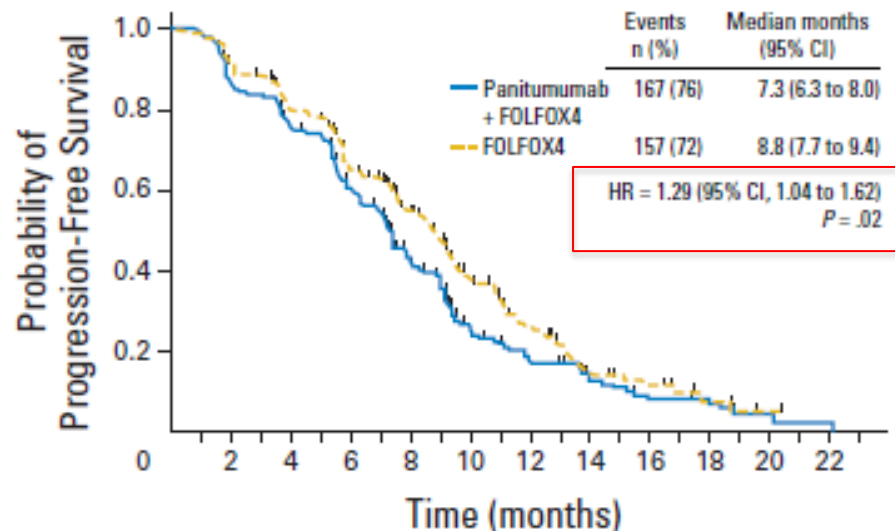


PRIME Study Findings

Wild type-KRAS



Mutant-KRAS



In May 2014, the Food and Drug Administration approved panitumumab in combination with FOLFOX for the first-line treatment of mCRC for patients with **wild-type KRAS tumors** (assessed using the theascreen KRAS test)



Who is the target population?

TRIAL POPULATION

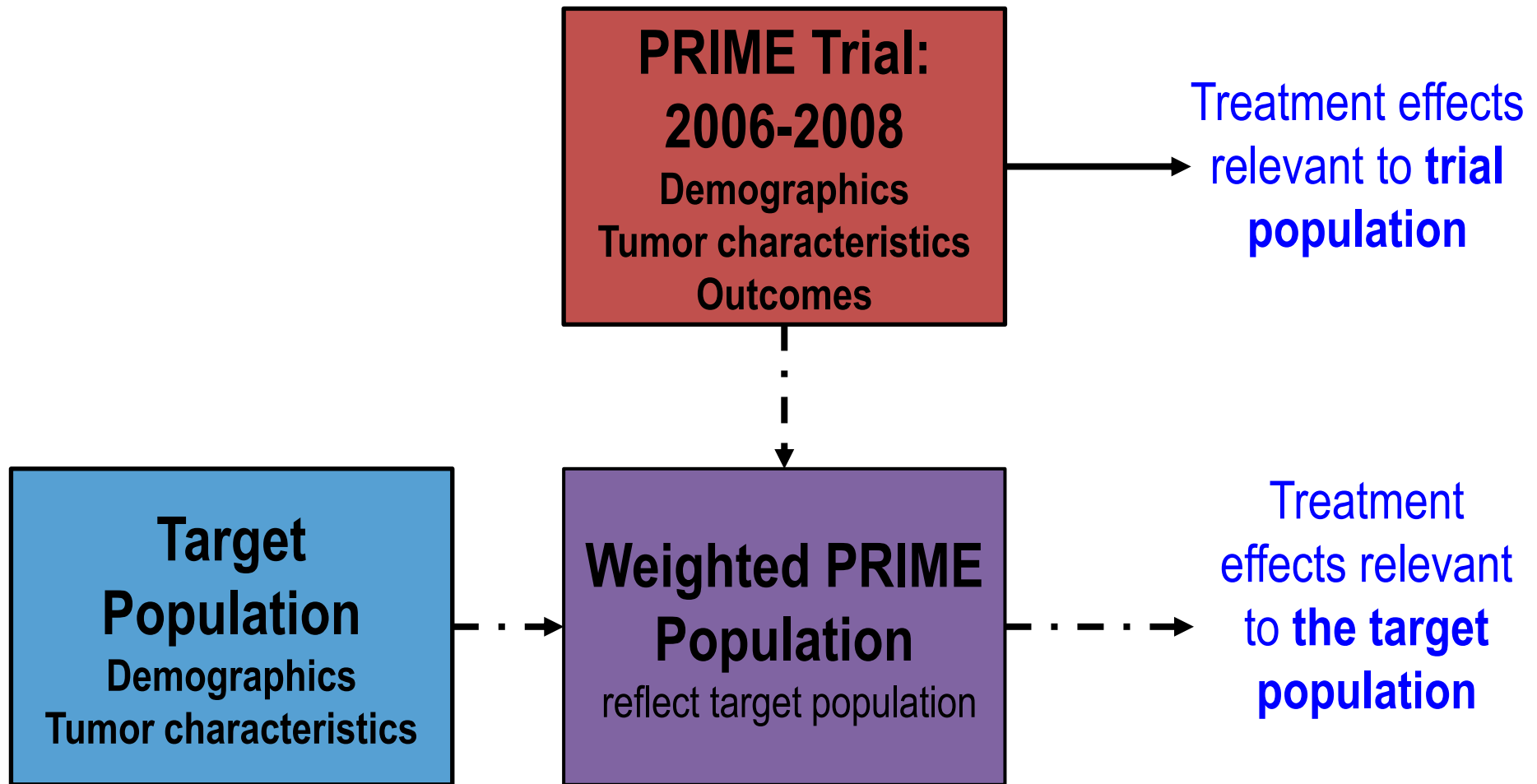
- **Population:** PRIME Study Eligibility
- **Place:** Ex-US
- **Time:** 2006-2008

TARGET POPULATION

- **Population:** Meets PRIME eligibility with KRAS wild-type tumors
- **Place:** Simulated
- **Time:** Simulated



Our goal for today



Questions?

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