## **Supplementary Online Content**

Cremolini C, Antoniotti C, Lonardi S, et al. Activity and safety of cetuximab plus modified FOLFOXIRI followed by maintenance with cetuximab or bevacizumab for *RAS* and *BRAF* wild-type metastatic colorectal cancer: a randomized phase 2 clinical trial. *JAMA Oncol*. Published online February 15, 2018. 10.1001/jamaoncol.2017.5314

**eAppendix.** Participating Centers and Principal Investigators

**eTable 1.** Main Demographic and Clinical Characteristics of Patients in the mITT Population

**eTable 2.** Activity Results in the mITT Population

**eTable 3.** Grade ≥3 Adverse Events Occurring in at Least 3% of Patients During Induction and Maintenance

**eTable 4.** Treatments After Progression According to Randomization Arm

**eFigure.** Distribution of Deepness of Response in the mITT Population, According to Treatment Arm

This supplementary material has been provided by the authors to give readers additional information about their work.

## eAppendix. Participating Centers and Principal Investigators

| Principal Investigator   | Site Name   | City             |
|--------------------------|---|------------------|
| Alfredo Falcone          | Polo Oncologico – Ospedale Santa Chiara                                 | Pisa             |
| Manuela Rossi            | A.O.SS. Antonio e Biagio e Cesare Arrigo                                | Alessandria      |
| Sergio Frustaci          | Centro di Riferimento Oncologico IRCCS                                  | Aviano           |
| Carmine Pinto            | Ospedale Sant'Orsola  | Bologna          |
| Alberto Zaniboni         | Fondazione Poliambulanza  | Brescia          |
| Francesca<br>Valcamonico | ASST degli Spedali Civili   | Brescia          |
| Cristina Granetto        | Ospedale Santa Croce e Carle  | Cuneo            |
| Teresa Gamucci           | Ospedale F. Spaziani  | Frosinone        |
| Silvana Chiara           | Ospedale San Martino IRCCS  | Genova           |
| Luca Gianni              | Ospedale San Raffaele IRCCS   | Milano           |
| Sara Lonardi             | Istituto Oncologico Veneto IRCCS  | Padova           |
| Giacomo Allegrini        | Ospedale "Felice Lotti"   | Pontedera        |
| Corrado Boni             | Arcispedale Santa Maria Nuova IRCSS                                     | Reggio Emilia    |
| Ida Pavese               | Ospedale San Pietro Fatebenefratelli                                    | Roma             |
| Domenico Corsi           | Ospedale San Giovanni Calibita Fatebenefratelli                         | Roma             |
| Enrico Cortesi           | Policlinico Umberto I   | Roma             |
| Giuseppe Tonini          | Università Campus Biomedico   | Roma             |
| Alessandro Bertolini     | Ospedale di Sondrio   | Sondrio          |
| Libero Ciuffreda         | Azienda Ospedaliero–Universitaria Città della Salute<br>e della Scienza | Torino           |
| Giuseppe Aprile          | Ospedale Santa Maria della Misericordia                                 | Udine            |
| Domenico Amoroso         | Ospedale Versilia   | Lido di Camaiore |

**eTable 1.** Main Demographic and Clinical Characteristics of Patients in the mITT Population

| Characteristic              | Arm A<br>(n= 59) | Arm B<br>(n= 57) | Overall mITT<br>(n= 116) |
|-----------------------------|------------------|------------------|--------------------------|
|                             | (11- 33)         | (11- 37)         | (11-110)                 |
| Age (years)                 | 61 (52-67)       | 59 (53-67)       | 59.5 (53-67)             |
| Sex                         |                  |                  |                          |
| Male                        | 40 (68%)         | 42 (74%)         | 82 (71%)                 |
| Female                      | 19 (32%)         | 15 (26%)         | 34 (29%)                 |
| ECOG PS                     |                  |                  |                          |
| 0                           | 53 (90%)         | 50 (88%)         | 103 (89%)                |
| 1-2                         | 6 (10%)          | 7 (12%)          | 13 (11%)                 |
| Synchronous Metastases      |                  |                  |                          |
| Yes                         | 51 (86%)         | 47 (82%)         | 98 (84%)                 |
| No                          | 8 (14%)          | 10 (18%)         | 18 (16%)                 |
| Prior Adjuvant chemotherapy |                  |                  |                          |
| Yes                         | 6 (10%)          | 8 (14%)          | 14 (12%)                 |
| No                          | 53 (90%)         | 49 (86%)         | 102 (88%)                |
| Primary Tumor Site          | , ,              |                  |                          |
| Right                       | 14 (24%)         | 7 (12%)          | 21 (18%)                 |
| Left                        | 30 (51%)         | 35 (62%)         | 65 (56%)                 |
| Rectum                      | 15 (25%)         | 15 (26%)         | 30 (26%)                 |
| Number of Metastatic Sites  |                  |                  |                          |
| 1                           | 22 (5.60()       | 20 (540()        | 60 (500()                |
| >1                          | 33 (56%)         | 29 (51%)         | 62 (53%)                 |
|                             | 26 (44%)         | 28 (49%)         | 54 (47%)                 |
| Liver Only Disease          |                  |                  |                          |
| Yes                         | 20 (470/)        | 24 (420()        | F2 (4F0/)                |
| No                          | 28 (47%)         | 24 (42%)         | 52 (45%)                 |
| December 1 December 2       | 31 (53%)         | 33 (58%)         | 64 (55%)                 |
| Resected Primary Tumor      | 25 (500()        | 22 (500()        | 60 (500()                |
| Yes                         | 35 (59%)         | 33 (58%)         | 68 (59%)                 |
| No                          | 24 (41%)         | 24 (42%)         | 48 (41%)                 |

Data are median (IQR) or number (%). ECOG PS, Eastern Cooperative Oncology Group Performance Status. Arm A indicates mFOLFOXIRI plus cetuximab, followed by maintenance with cetuximab. Arm B indicates mFOLFOXIRI plus cetuximab, followed by maintenance with bevacizumab.

eTable 2. Activity Results in the mITT Population

|                                 | Treatment arm              |                            | Overall population           |
|---------------------------------|----------------------------|----------------------------|------------------------------|
|                                 | Arm A<br>(n= 59)<br>No (%) | Arm B<br>(n= 57)<br>No (%) | n= 116<br>No (%)             |
| Complete response               | 3 (5%)                     | 2 (3%)                     | 5 (4%)                       |
| Partial response                | 37 (63%)                   | 41 (72%)                   | 78 (68%)                     |
| Stable disease                  | 14 (24%)                   | 8 (14%)                    | 22 (19%)                     |
| Progressive disease             | 2 (3%)                     | 2 (4%)                     | 4 (3%)                       |
| Not evaluated                   | 3 (5%)                     | 4 (7%)                     | 7 (6%)                       |
| Objective Response Rate         | 40 (68%)                   | 43 (75%)                   | 83 (72%)                     |
| Disease Control Rate            | 54 (92%)                   | 51 (89%)                   | 105 (91%)                    |
|                                 | Arm A<br>(n= 54)<br>No (%) | Arm B<br>(n= 53)<br>No (%) | Overall<br>(n=107)<br>No (%) |
| Early Objective Response Rate   | 40 (74%)                   | 41 (77%)                   | 81 (76%)                     |
| Depth of Response, median (IQR) | 49.1% (30.7%–67.9%)        | 55.7% (41.5%–67.6%)        | 53.2% (37.1%–67.6%)          |

Data are median (IQR) or number (%). Some percentages do not add up to 100 because of rounding. Arm A indicates mFOLFOXIRI plus cetuximab, followed by maintenance with cetuximab. Arm B indicates mFOLFOXIRI plus cetuximab, followed by maintenance with bevacizumab.

**eTable 3.** Grade ≥3 Adverse Events Occurring in at Least 3% of Patients During Induction and Maintenance

| Safety results during induction   |                  |                  |                                    |
|-----------------------------------|------------------|------------------|------------------------------------|
| AEs, No (%)                       | Arm A<br>(n= 59) | Arm B<br>(n= 57) | Overall mITT<br>n= 116             |
| Vomit                             | 2 (3%)           | 1 (2%)           | 3 (3%)                             |
| Diarrhea                          | 12 (20%)         | 9 (16%)          | 21 (18%)                           |
| Stomatitis                        | 4 (7%)           | 3 (5%)           | 7 (6%)                             |
| Neutropenia                       | 17 (29%)         | 19 (33%)         | 36 (31%)                           |
| Febrile neutropenia               | 2 (3%)           | 1 (2%)           | 3 (3%)                             |
| Neurotoxicity                     | 4 (7%)           | 0                | 4 (3%)                             |
| Skin toxicity                     | 11 (19%)         | 7 (12%)          | 18 (16%)                           |
| Asthenia                          | 6 (10%)          | 5 (9%)           | 11 (9%)                            |
| Anorexia                          | 3 (5%)           | 1 (2%)           | 4 (3%)                             |
| Venous thromboembolism            | 1 (2%)           | 2 (3%)           | 3 (3%)                             |
| Safety results during maintenance |                  |                  |                                    |
| AEs, No (%)                       | Arm A<br>(n= 40) | Arm B<br>(n= 38) | Maintenance<br>population<br>n= 78 |
| Hand-foot syndrome                | 2 (5%)           | 0                | 2 (3%)                             |
| Skin toxicity                     | 8 (20%)          | 1 (3%)           | 9 (12%)                            |
| Hypertension                      | 0                | 2 (5%)           | 2 (3%)                             |

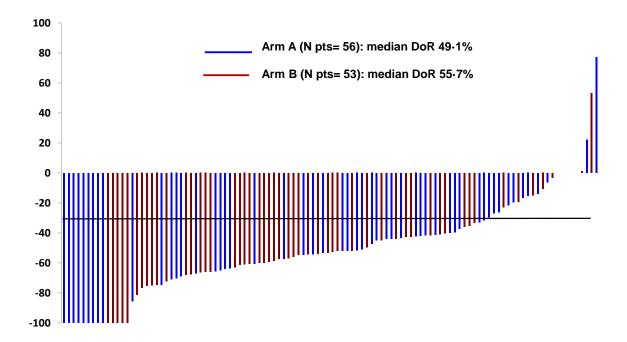
Data are number (%). AEs: adverse events. Arm A indicates mFOLFOXIRI plus cetuximab, followed by maintenance with cetuximab. Arm B indicates mFOLFOXIRI plus cetuximab, followed by maintenance with bevacizumab.

eTable 4. Treatments After Progression According to Randomization Arm

|                                  | Treatment arm              |                            | Overall mITT     |
|----------------------------------|----------------------------|----------------------------|------------------|
|                                  | Arm A<br>(n= 59)<br>No (%) | Arm B<br>(n= 57)<br>No (%) | n= 116<br>No (%) |
| Alive after disease progression  | 53 (90%)                   | 54 (95%)                   | 107 (92%)        |
| Any 2 <sup>nd</sup> line therapy | 43 (81%)                   | 42 (78%)                   | 85 (79%)         |
| 2 <sup>nd</sup> line therapy     | n= 43                      | n= 42                      | n= 85            |
| mFOLFOXIRI plus cet              | 19 (44%)                   | 28 (67%)                   | 47 (55%)         |
| FOLFOX/FOLFIRI plus cet          | 6 (14%)                    | 7 (17%)                    | 13 (15%)         |
| FOLFOXIRI plus pan               | 2 (5%)                     | 0                          | 2 (2%)           |
| cet or pan monotherapy           | 0                          | 2 (5%)                     | 2 (2%)           |
| FOLFOXIRI plus bev               | 2 (5%)                     | 0                          | 2 (2%)           |
| FOLFOX/FOLFIRI/XELOX plus bev    | 9 (21%)                    | 2 (5%)                     | 11 (13%)         |
| capecitabine plus bev            | 2 (5%)                     | 1 (2%)                     | 3 (4%)           |
| FOLFOX/FOLFIRI                   | 3 (7%)                     | 0                          | 3 (4%)           |
| Other                            | 0                          | 2 (5%)                     | 2 (2%)           |

Data are number (%). Some percentages do not add up to 100 because of rounding. Cet: cetuximab; mFOLFOXIRI: modified fluorouracil, leucovorin, oxaliplatin and irinotecan; FOLFOX: fluorouracil, leucovorin, and oxaliplatin; FOLFIRI: fluorouracil, leucovorin, and irinotecan; bev: bevacizumab; pan: panitumumab; FOLFOXIRI: fluorouracil, leucovorin, oxaliplatin and irinotecan; XELOX: capecitabine and oxaliplatin. Arm A indicates mFOLFOXIRI plus cetuximab, followed by maintenance with cetuximab. Arm B indicates mFOLFOXIRI plus cetuximab, followed by maintenance with bevacizumab.

**eFigure.** Distribution of Deepness of Response in the mITT Population, According to Treatment Arm



DoR, depth of response; mos, months. Arm A indicates mFOLFOXIRI plus cetuximab, followed by maintenance with cetuximab. Arm B indicates mFOLFOXIRI plus cetuximab, followed by maintenance with bevacizumab.