TMB scores were calculated for each ccRCC samples.

id	TMB
TCGA-CJ-5672-01A-11D-1534-10	2.842105263
TCGA-B0-5099-01A-01D-1421-08	2.105263158
TCGA-CZ-5459-01A-01D-1501-10	2.789473684
TCGA-CZ-5455-01A-01D-1501-10	1.236842105
TCGA-DV-A4VX-01A-11D-A25V-10	2.605263158
TCGA-CJ-5678-01A-11D-1534-10	1.5
TCGA-CZ-5469-01A-01D-1501-10	1.421052632
TCGA-EU-5905-01A-11D-1669-08	1.710526316
TCGA-CJ-5679-01A-11D-1534-10	2.736842105
TCGA-DV-5565-01A-01D-1534-10	1.789473684
TCGA-BP-4998-01A-01D-1462-08	1
TCGA-B8-A54I-01A-21D-A33K-10	1.657894737
TCGA-BP-4970-01A-01D-1462-08	0.789473684
TCGA-CW-5589-01A-01D-1534-10	1.5
TCGA-CJ-4918-01A-01D-1429-08	2.131578947
TCGA-B8-A54G-01A-11D-A25V-10	1.263157895
TCGA-B0-5400-01A-01D-1501-10	0.842105263
TCGA-CZ-5458-01A-01D-1501-10	0.921052632
TCGA-CJ-6032-01A-11D-1669-08	1.421052632
TCGA-BP-5170-01A-01D-1429-08	1.368421053
TCGA-BP-5184-01A-01D-1429-08	0.815789474
TCGA-B0-5697-01A-11D-1534-10	1.631578947
TCGA-BP-4760-01A-02D-1421-08	0.315789474
TCGA-A3-3322-01A-01D-0966-08	1.552631579
TCGA-CZ-5460-01A-01D-1501-10	1.921052632
TCGA-A3-A8OV-01A-11D-A36X-10	4.868421053
TCGA-B4-5843-01A-11D-1669-08	1.289473684
TCGA-BP-4962-01A-01D-1462-08	0.921052632
TCGA-B0-5094-01A-01D-1421-08	2.394736842
TCGA-CJ-5684-01A-11D-1534-10	1.421052632
TCGA-B8-5550-01A-01D-1534-10	3
TCGA-B8-4143-01A-01D-1806-10	1.894736842
TCGA-A3-3383-01A-01D-0966-08	1.657894737
TCGA-B8-5158-01A-01D-1421-08	1.289473684
TCGA-CW-6097-01A-11D-1669-08	0.342105263
TCGA-B0-5713-01A-11D-1669-08	2.868421053
TCGA-B0-5077-01A-01D-1462-08	1.5
TCGA-CJ-4902-01A-01D-1429-08	1.736842105
TCGA-BP-4963-01A-01D-1462-08	2.657894737
TCGA-B8-5163-01A-01D-1421-08	1.973684211

TCGA-A3-A6NL-01A-11D-A33K-10	1.342105263
TCGA-CJ-4903-01A-01D-1429-08	1.368421053
TCGA-B2-5639-01A-01D-1534-10	1.736842105
TCGA-BP-4986-01A-01D-1462-08	1.131578947
TCGA-6D-AA2E-01A-11D-A36X-10	0.815789474
TCGA-B8-5162-01A-01D-1421-08	1.710526316
TCGA-AK-3465-01A-01D-0966-08	0.842105263
TCGA-AS-3778-01A-01D-0966-08	1.763157895
TCGA-AK-3427-01A-01D-0966-08	0.447368421
TCGA-B0-4945-01A-01D-1421-08	1.131578947
TCGA-B0-5096-01A-01D-1421-08	2.631578947
TCGA-A3-3385-01A-02D-1421-08	1.894736842
TCGA-G6-A8L7-01A-11D-A36X-10	2.5
TCGA-MW-A4EC-01A-11D-A25V-10	1.421052632
TCGA-CZ-5470-01A-01D-1501-10	1.394736842
TCGA-DV-A4W0-01A-11D-A25V-10	1.947368421
TCGA-BP-5192-01A-01D-1429-08	1.657894737
TCGA-BP-5008-01A-01D-1462-08	0.973684211
TCGA-B0-5691-01A-11D-1534-10	1.5
TCGA-B8-4148-01A-02D-1386-10	0.973684211
TCGA-A3-3365-01A-01D-0966-08	1.131578947
TCGA-AK-3444-01A-01D-0966-08	2.684210526
TCGA-BP-4972-01A-01D-1462-08	1.263157895
TCGA-BP-5169-01A-01D-1429-08	1.5
TCGA-BP-5190-01A-01D-1429-08	1.263157895
TCGA-BP-4795-01A-02D-1421-08	0.657894737
TCGA-BP-4981-01A-01D-1462-08	1.473684211
TCGA-B2-5641-01A-01D-1534-10	1.921052632
TCGA-B0-5088-01A-01D-1462-08	1.578947368
TCGA-CJ-4916-01A-01D-1429-08	1.368421053
TCGA-CW-5580-01A-01D-1669-08	2.684210526
TCGA-G6-A8L8-01A-21D-A36X-10	2.421052632
TCGA-CJ-6028-01A-11D-1669-08	1.184210526
TCGA-CJ-4882-01A-02D-1429-08	1.736842105
TCGA-B0-5097-01A-01D-1421-08	1.684210526
TCGA-CZ-5456-01A-01D-1501-10	1.868421053
TCGA-B8-5551-01A-01D-1534-10	1.078947368
TCGA-B0-5108-01A-01D-1421-08	1.394736842
TCGA-B0-5100-01A-01D-1421-08	0.973684211
TCGA-CJ-4913-01A-01D-1429-08	1.342105263
TCGA-B8-A54D-01A-21D-A25V-10	1.789473684
TCGA-BP-5009-01A-01D-1462-08	1.210526316
TCGA-CJ-5686-01A-11D-1669-08	1.921052632

TCGA-CW-5585-01A-01D-1534-10	1.526315789
TCGA-CJ-5682-01A-11D-1534-10	2.184210526
TCGA-BP-4989-01A-01D-1462-08	2
TCGA-B0-5085-01A-01D-1462-08	2
TCGA-MM-A84U-01A-11D-A36X-10	2.736842105
TCGA-B4-5838-01A-11D-1669-08	1.815789474
TCGA-B8-5159-01A-01D-1421-08	1.552631579
TCGA-B4-5836-01A-11D-1669-08	2.131578947
TCGA-B0-5107-01A-01D-1421-08	1.842105263
TCGA-AK-3447-01A-01W-0886-08	0.631578947
TCGA-B0-5121-01A-02D-1421-08	1.342105263
TCGA-B2-5635-01A-01D-A270-10	1.736842105
TCGA-CJ-4901-01A-01D-1429-08	1.342105263
TCGA-B0-5119-01A-02D-1421-08	2.631578947
TCGA-BP-4983-01A-01D-1462-08	1.710526316
TCGA-B0-5711-01A-11D-1669-08	0.894736842
TCGA-B8-5164-01A-01D-1421-08	2.289473684
TCGA-AS-3777-01A-01D-0966-08	0.578947368
TCGA-B0-4823-01A-02D-1421-08	3.236842105
TCGA-EU-5907-01A-11D-1669-08	1.289473684
TCGA-B4-5377-01A-01D-1501-10	1.447368421
TCGA-A3-A8OW-01A-11D-A36X-10	0.552631579
TCGA-BP-5001-01A-01D-1462-08	0.973684211
TCGA-CJ-4907-01A-01D-1429-08	1.578947368
TCGA-BP-5199-01A-01D-1429-08	2.342105263
TCGA-B0-5706-01A-11D-1534-10	1.736842105
TCGA-EU-5906-01A-11D-1669-08	1.736842105
TCGA-BP-5004-01A-01D-1462-08	1.552631579
TCGA-CJ-4912-01A-01D-1429-08	2.447368421
TCGA-B0-5110-01A-01D-1421-08	1.894736842
TCGA-BP-4977-01A-01D-1462-08	1.368421053
TCGA-BP-4968-01A-01D-1462-08	1.184210526
TCGA-B0-5399-01A-01D-1501-10	1.131578947
TCGA-B0-5693-01A-11D-1534-10	1.078947368
TCGA-A3-3331-01A-01W-0886-08	2
TCGA-BP-5010-01A-02D-1421-08	1.973684211
TCGA-BP-5173-01A-01D-1429-08	2.236842105
TCGA-CJ-4904-01A-02D-1429-08	1.052631579
TCGA-B0-5703-01A-11D-1534-10	2.315789474
TCGA-CZ-5467-01A-01D-1501-10	1.736842105
TCGA-A3-3363-01A-01D-0966-08	1.368421053
TCGA-CJ-5675-01A-11D-1534-10	1.789473684
TCGA-BP-5176-01A-01D-1429-08	3.552631579

TCGA-CZ-4864-01A-01D-1501-10	2.526315789
TCGA-B8-4622-01A-02D-1553-08	1.684210526
TCGA-DV-5576-01A-01D-1534-10	0.026315789
TCGA-A3-3387-01A-01D-1534-10	2.078947368
TCGA-DV-5575-01A-01D-1534-10	0.684210526
TCGA-B8-A7U6-01A-12D-A36X-10	1.447368421
TCGA-CJ-5680-01A-11D-1534-10	1.657894737
TCGA-B4-5832-01A-11D-1669-08	1.684210526
TCGA-B0-5120-01A-01D-1421-08	1.710526316
TCGA-BP-4995-01A-01D-1462-08	1.289473684
TCGA-A3-A6NI-01A-11D-A33K-10	2.631578947
TCGA-CZ-5466-01A-01D-1501-10	1.921052632
TCGA-A3-3317-01A-01D-0966-08	2.421052632
TCGA-A3-3382-01A-01D-0966-08	2.973684211
TCGA-CZ-5457-01A-01D-1501-10	2.157894737
TCGA-BP-5168-01A-01D-1421-08	3.684210526
TCGA-A3-3320-01A-01D-0966-08	2.421052632
TCGA-AK-3440-01A-01D-0966-08	0.605263158
TCGA-T7-A92I-01A-11D-A36X-10	1
TCGA-B2-5633-01A-01D-A270-10	1.578947368
TCGA-B0-5084-01A-01D-1462-08	1.447368421
TCGA-CJ-5671-01A-11D-1534-10	1.736842105
TCGA-CW-5591-01A-01D-1534-10	1.052631579
TCGA-CZ-5987-01A-11D-1669-08	1.605263158
TCGA-B8-A54F-01A-11D-A25V-10	0.894736842
TCGA-BP-5181-01A-01D-1429-08	1.657894737
TCGA-G6-A8L6-01A-11D-A36X-10	2.026315789
TCGA-B0-4842-01A-02D-1421-08	1.552631579
TCGA-BP-4975-01A-01D-1462-08	0.5
TCGA-BP-4985-01A-01D-1462-08	2.236842105
TCGA-CZ-5988-01A-11D-1669-08	1.342105263
TCGA-B8-4151-01A-01D-1806-10	1.631578947
TCGA-CZ-5985-01A-11D-1669-08	1.631578947
TCGA-B0-5690-01A-11D-1534-10	1.631578947
TCGA-A3-3319-01A-01D-0966-08	2.157894737
TCGA-B0-5117-01A-01D-1421-08	0.315789474
TCGA-AK-3453-01A-01D-0966-08	0.368421053
TCGA-B0-5705-01A-11D-1534-10	2.394736842
TCGA-CZ-5984-01A-11D-1669-08	1.236842105
TCGA-CZ-5465-01A-01D-1806-10	3.236842105
TCGA-B0-5106-01A-01D-1421-08	2.526315789
TCGA-B8-5549-01A-01D-1534-10	1.789473684
TCGA-BP-4987-01A-01D-1462-08	0.710526316

TCGA-B4-5835-01A-11D-1669-08	1.868421053
TCGA-CJ-4923-01A-01D-1429-08	1.263157895
TCGA-A3-3374-01A-01D-0966-08	0.447368421
TCGA-B0-5707-01A-11D-1534-10	1.184210526
TCGA-BP-5186-01A-01D-1429-08	0.921052632
TCGA-CJ-6027-01A-11D-1669-08	2.447368421
TCGA-A3-3370-01A-02D-1421-08	1.131578947
TCGA-BP-5201-01A-01D-1429-08	1.210526316
TCGA-BP-5191-01A-01D-1429-08	1.657894737
TCGA-B0-5702-01A-11D-1534-10	1.315789474
TCGA-GK-A6C7-01A-11D-A33K-10	3.315789474
TCGA-MM-A564-01A-11D-A25V-10	3.026315789
TCGA-CW-5581-01A-02D-1534-10	1.552631579
TCGA-CJ-5683-01A-11D-1534-10	1.894736842
TCGA-CJ-4920-01A-01D-1429-08	4.131578947
TCGA-A3-3373-01A-02D-1421-08	1.842105263
TCGA-A3-3346-01A-01D-0966-08	2.605263158
TCGA-BP-4999-01A-01D-1462-08	1.368421053
TCGA-A3-3378-01A-01D-0966-08	2
TCGA-CW-6090-01A-11D-1669-08	3.368421053
TCGA-B8-4621-01A-01D-1501-10	2.552631579
TCGA-AK-3443-01A-01D-0966-08	0.236842105
TCGA-DV-5566-01A-01D-1534-10	1.578947368
TCGA-BP-5187-01A-01D-1429-08	1.552631579
TCGA-B8-A54K-01A-11D-A33K-10	0.736842105
TCGA-CW-5588-01A-01D-1534-10	1.315789474
TCGA-CJ-4899-01A-01D-1462-08	0.921052632
TCGA-BP-4992-01A-01D-1462-08	1.105263158
TCGA-CW-6087-01A-11D-1669-08	1.394736842
TCGA-B2-A4SR-01A-11D-A25V-10	1.289473684
TCGA-B8-4153-01B-11D-1669-08	1.842105263
TCGA-A3-A8OU-01A-11D-A36X-10	2.289473684
TCGA-B0-5700-01A-11D-1534-10	2.131578947
TCGA-B0-5109-01A-02D-1421-08	1.394736842
TCGA-B0-5102-01A-01D-1421-08	1.342105263
TCGA-B0-5098-01A-01D-1421-08	21.15789474
TCGA-BP-5194-01A-02D-1429-08	0.710526316
TCGA-BP-5178-01A-01D-1429-08	1.789473684
TCGA-A3-3311-01A-01D-0966-08	1.684210526
TCGA-A3-A8CQ-01A-11D-A36X-10	1.5
TCGA-CZ-5451-01A-01D-1501-10	2.368421053
TCGA-BP-5195-01A-02D-1429-08	2
TCGA-A3-3316-01A-01D-0966-08	1.210526316

TCGA-CZ-4865-01A-02D-1501-10	2.578947368
TCGA-BP-5007-01A-01D-1462-08	0.736842105
TCGA-B0-5402-01A-01D-1501-10	1.394736842
TCGA-CW-6093-01A-11D-1669-08	3.263157895
TCGA-B8-5553-01A-01D-1534-10	1.421052632
TCGA-B0-5083-01A-02D-1421-08	0.236842105
TCGA-MM-A563-01A-11D-A25V-10	1.394736842
TCGA-CZ-5453-01A-01D-1501-10	2.315789474
TCGA-B0-5081-01A-01D-1462-08	0.684210526
TCGA-BP-4961-01A-01D-1462-08	1.052631579
TCGA-BP-4973-01A-01D-1462-08	0.842105263
TCGA-BP-4982-01A-01D-1462-08	1.052631579
TCGA-CJ-5677-01A-11D-1534-10	1.921052632
TCGA-B8-A54E-01A-11D-A25V-10	1.342105263
TCGA-CJ-5676-01A-11D-1534-10	1.736842105
TCGA-CZ-5461-01A-01D-1501-10	1.894736842
TCGA-B0-5695-01A-11D-1534-10	1.763157895
TCGA-DV-5574-01A-01D-1534-10	0.315789474
TCGA-A3-3376-01A-02D-1421-08	1.289473684
TCGA-DV-5569-01A-01D-1534-10	0.289473684
TCGA-BP-5183-01A-01D-1429-08	1.5
TCGA-BP-4964-01A-01D-1462-08	2.078947368
TCGA-B2-4101-01A-02D-1458-08	1.105263158
TCGA-A3-3380-01A-01D-0966-08	0.947368421
TCGA-A3-3372-01A-01W-0886-08	1.763157895
TCGA-A3-3326-01A-01D-0966-08	1.736842105
TCGA-B0-5696-01A-11D-1534-10	1.421052632
TCGA-B0-5113-01A-01D-1421-08	1.131578947
TCGA-CJ-4905-01A-02D-1429-08	1.736842105
TCGA-3Z-A93Z-01A-11D-A36X-10	2.947368421
TCGA-CZ-5452-01A-01D-1501-10	0.894736842
TCGA-B0-4827-01A-02D-1421-08	2.447368421
TCGA-A3-A6NN-01A-12D-A33K-10	2.947368421
TCGA-BP-5174-01A-01D-1429-08	1.157894737
TCGA-BP-5200-01A-01D-1429-08	1.289473684
TCGA-CZ-4856-01A-02D-1429-08	1.473684211
TCGA-B0-5092-01A-01D-1421-08	1.421052632
TCGA-CZ-5454-01A-01D-1501-10	0.868421053
TCGA-B4-5834-01A-11D-1669-08	1
TCGA-B8-5546-01A-01D-1534-10	0.368421053
TCGA-B8-A54H-01A-11D-A33K-10	2.368421053
TCGA-B8-4146-01B-11D-1669-08	1.131578947
TCGA-B0-5712-01A-11D-1669-08	2.973684211

TCGA-BP-5185-01A-01D-1429-08	2.368421053
TCGA-BP-4993-01A-02D-1421-08	1.473684211
TCGA-G6-A5PC-01A-11D-A33K-10	1.921052632
TCGA-CW-5583-01A-02D-1534-10	0.736842105
TCGA-CJ-5681-01A-11D-1534-10	0.552631579
TCGA-B0-5710-01A-11D-1669-08	1.157894737
TCGA-CZ-5462-01A-01D-1501-10	1.894736842
TCGA-BP-4770-01A-01D-1501-10	1.552631579
TCGA-B0-5104-01A-01D-1421-08	1.868421053
TCGA-EU-5904-01A-11D-1669-08	1.078947368
TCGA-B8-5165-01A-01D-1421-08	0.526315789
TCGA-BP-5175-01A-01D-1429-08	1.157894737
TCGA-CZ-5989-01A-11D-1669-08	1.105263158
TCGA-B0-5699-01A-11D-1534-10	1.473684211
TCGA-CJ-5689-01A-11D-1534-10	2.105263158
TCGA-CZ-5986-01A-11D-1669-08	1.815789474
TCGA-CJ-6031-01A-11D-1669-08	1.842105263
TCGA-A3-3357-01A-02D-1421-08	2.842105263
TCGA-BP-4991-01A-01D-1462-08	1.394736842
TCGA-BP-5198-01A-01D-1429-08	2.236842105
TCGA-BP-5000-01A-01D-1462-08	1.315789474
TCGA-B2-4102-01A-02D-1386-10	2.236842105
TCGA-BP-4988-01A-01D-1462-08	0.815789474
TCGA-BP-4177-01A-02D-1421-08	0.421052632
TCGA-B0-5709-01A-11D-1534-10	2.052631579
TCGA-BP-4782-01A-02D-1421-08	2.184210526
TCGA-B2-5636-01A-02D-1534-10	0.552631579
TCGA-A3-3313-01A-01D-0966-08	2.789473684
TCGA-CJ-6033-01A-11D-1669-08	2.263157895
TCGA-B0-5698-01A-11D-1669-08	2.157894737
TCGA-B0-5692-01A-11D-1534-10	2.210526316
TCGA-A3-3367-01A-02D-1421-08	2.052631579
TCGA-B0-5115-01A-01D-1421-08	1.578947368
TCGA-CZ-5982-01A-11D-1669-08	1.342105263
TCGA-CZ-4853-01A-01D-1429-08	3.421052632
TCGA-BP-5180-01A-01D-1429-08	1.315789474
TCGA-B8-A54J-01A-11D-A33K-10	2.078947368
TCGA-CZ-5468-01A-01D-1501-10	3.552631579
TCGA-CZ-4863-01A-01D-1501-10	1.131578947
TCGA-AK-3455-01A-01D-0966-08	1.736842105
TCGA-B0-4700-01A-02D-1534-10	0.394736842
TCGA-DV-5568-01A-01D-1534-10	0.473684211
TCGA-BP-5196-01A-01D-1429-08	1.421052632

TCGA-B0-5095-01A-01D-1421-08	2.210526316
TCGA-BP-4974-01A-01D-1462-08	0.894736842
TCGA-BP-5177-01A-01D-1429-08	1.368421053
TCGA-DV-5573-01A-01D-1534-10	0.842105263
TCGA-B8-A8YJ-01A-13D-A38X-10	0.052631579
TCGA-BP-4976-01A-01D-1462-08	2.789473684
TCGA-BP-4971-01A-01D-1462-08	1.236842105
TCGA-A3-3358-01A-01D-1534-10	1.921052632
TCGA-A3-3323-01A-01D-0966-08	1.289473684
TCGA-DV-5567-01A-01D-1534-10	0.368421053
TCGA-B8-5545-01A-01D-1669-08	0.631578947
TCGA-BP-4960-01A-01D-1462-08	1.789473684
TCGA-A3-A6NJ-01A-12D-A33K-10	1.421052632
TCGA-BP-5182-01A-01D-1429-08	2.078947368
TCGA-CZ-4859-01A-02D-1429-08	2.973684211
TCGA-B0-5116-01A-02D-1421-08	1.842105263
TCGA-B0-5812-01A-11D-1669-08	1.342105263
TCGA-CZ-4866-01A-01D-1501-10	2.5
TCGA-B0-5075-01A-01D-1462-08	2.736842105
TCGA-CJ-4900-01A-01D-1462-08	1.394736842
TCGA-CJ-4908-01A-01D-1429-08	0.868421053
TCGA-A3-3308-01A-01D-0966-08	2.394736842
TCGA-CW-5587-01A-01D-1534-10	1.815789474
TCGA-CZ-5463-01A-01D-1501-10	1.552631579
TCGA-BP-5202-01A-02D-1429-08	1.105263158
TCGA-BP-4965-01A-01D-1462-08	1.552631579
TCGA-BP-5006-01A-01D-1462-08	1.105263158
TCGA-BP-5189-01A-02D-1429-08	1.342105263
TCGA-B8-5552-01B-11D-1669-08	0.710526316
TCGA-BP-4801-01A-02D-1421-08	1.631578947
TCGA-CJ-4869-01A-02D-1429-08	2.105263158
TCGA-B0-5694-01A-11D-1534-10	1.947368421
TCGA-BP-4967-01A-01D-1462-08	2.052631579
TCGA-B4-5844-01A-11D-1669-08	1.736842105
TCGA-DV-A4VZ-01A-11D-A25V-10	0.342105263
TCGA-A3-A8OX-01A-11D-A36X-10	0.236842105
TCGA-B0-5701-01A-11D-1534-10	3.052631579
TCGA-CJ-6030-01A-11D-1669-08	3.105263158