- 1 Systemic anticancer therapy for advanced renal cell
- 2 carcinoma: treatment options (intermediate or poor risk
- 3 **IMDC**)
- 4 Base all treatment choices on shared decision making. Think about enrolment into a
- 5 clinical trial as an option at each step.
- 6 Initial recommended treatment options are the:
- NICE technology appraisal guidance on cabozantinib with nivolumab or
- NICE technology appraisal guidance on lenvatinib with pembrolizumab or
- NICE technology appraisal guidance on nivolumab with ipilumumab or
- NICE technology appraisal guidance on avelumab with axitinib (managed access
- 11 through the Cancer Drugs Fund) or
- NICE technology appraisal guidance on cabozantinib or
- NICE technology appraisal guidance on sunitinib or
- NICE technology appraisal guidance on pazopanib or
- NICE technology appraisal guidance on tivozanib.

16 Initial treatment with cabozantinib with nivolumab

- 17 For people who have disease progression after initial treatment in line with the NICE
- 18 technology appraisal guidance on cabozantinib with nivolumab, recommended
- 19 treatment options are:
- the NICE technology appraisal guidance on axitinib or
- the NICE technology appraisal guidance on lenvatinib with everolimus or
- the NICE technology appraisal guidance on everolimus or
- the NICE technology appraisal guidance on sunitinib (NHS England Policy) or
- the NICE technology appraisal guidance on pazopanib (NHS England Policy) or
- the NICE technology appraisal guidance on tivozanib (NHS England Policy)
- nivolumab monotherapy (if cabozantinib is permanently discontinued due to
- toxicity and there is no evidence of progressive disease; NHS England Policy).

- 1 For people who have had initial treatment in line with the NICE technology appraisal
- 2 guidance on cabozantinib with nivolumab and have disease progression after
- 3 treatment in line with the NICE technology appraisal guidance on axitinib, the only
- 4 recommended treatment option is the NICE technology appraisal guidance on
- 5 everolimus.
- 6 For people who have had initial treatment in line with the NICE technology appraisal
- 7 guidance on cabozantinib with nivolumab and have disease progression after
- 8 treatment in line with the NICE technology appraisal guidance on sunitinib,
- 9 <u>pazopanib</u> or <u>tivozanib</u> (NHS England Policy), the only recommended treatment
- option is the <u>NICE technology appraisal guidance on everolimus</u>.
- 11 For people who have had initial treatment in line with the NICE technology appraisal
- 12 guidance on cabozantinib with nivolumab and have disease progression after
- 13 treatment with nivolumab monotherapy (because cabozantinib was permanently
- 14 discontinued due to toxicity and there was no evidence of progressive disease; NHS
- 15 England Policy), recommended treatment options are the:
- NICE technology appraisal guidance on axitinib or
- NICE technology appraisal guidance on lenvatinib with everolimus.
- 18 For people who have had initial treatment in line with the NICE technology appraisal
- 19 guidance on cabozantinib with nivolumab who have disease progression after
- 20 treatment with nivolumab monotherapy (because cabozantinib was permanently
- 21 discontinued due to toxicity and there was no evidence of progressive disease; NHS
- 22 England Policy) and disease progression after treatment in line with the NICE
- 23 <u>technology appraisal guidance on axitinib</u>, the only recommended treatment option is
- 24 NICE technology appraisal guidance on everolimus.

25 Initial treatment with lenvatinib with pembrolizumab

- 26 For people who have disease progression after initial treatment in line with the NICE
- 27 technology appraisal guidance on lenvatinib with pembrolizumab, recommended
- 28 treatment options are the:
- NICE technology appraisal guidance on cabozantinib or
- NICE technology appraisal guidance on everolimus or

- NICE technology appraisal guidance on axitinib or
- 2 NICE technology appraisal guidance on sunitinib (NHS England Policy) or
- NICE technology appraisal guidance on pazopanib (NHS England Policy) or
- NICE technology appraisal guidance on tivozanib (NHS England Policy).
- 5 For people who have had initial treatment in line with the NICE technology appraisal
- 6 <u>guidance on lenvatinib with pembrolizumab</u> and have disease progression after
- 7 treatment in line with the NICE technology appraisal guidance on cabozantinib, the
- 8 only recommended treatment option is the NICE technology appraisal guidance on
- 9 everolimus.
- 10 For people who have had initial treatment in line with the NICE technology appraisal
- 11 quidance on lenvatinib with pembrolizumab and have disease progression after
- 12 treatment in line with the NICE technology appraisal guidance on everolimus, the
- only recommended treatment option is the <u>NICE technology appraisal guidance on</u>
- 14 cabozantinib.
- 15 For people who have had initial treatment in line with the NICE technology appraisal
- 16 guidance on lenvatinib with pembrolizumab and have disease progression after
- 17 treatment in line with the NICE technology appraisal guidance on axitinib, the only
- 18 recommended treatment option is the NICE technology appraisal guidance on
- 19 everolimus.
- 20 For people who have had initial treatment in line with the NICE technology appraisal
- 21 <u>guidance on lenvatinib with pembrolizumab</u> and have disease progression after
- 22 treatment in line with the NICE technology appraisal guidance on sunitinib,
- 23 pazopanib or tivozanib (NHS England Policy), recommended treatment options are
- 24 the:
- NICE technology appraisal guidance on cabozantinib or
- NICE technology appraisal guidance on everolimus.
- 27 For people who have had initial treatment in line with the NICE technology appraisal
- 28 <u>guidance on lenvatinib with pembrolizumab</u> who have disease progression after
- 29 treatment in line with the NICE technology appraisal guidance on sunitinib,
- 30 pazopanib or tivozanib (NHS England Policy) and disease progression after

- 1 treatment in line with the <u>NICE technology appraisal guidance on cabozantinib</u>, the
- 2 only recommended treatment option is NICE technology appraisal guidance on
- 3 everolimus.
- 4 For people who have had initial treatment in line with the NICE technology appraisal
- 5 guidance on lenvatinib with pembrolizumab who have disease progression after
- 6 treatment in line with the NICE technology appraisal guidance on sunitinib,
- 7 pazopanib or tivozanib (NHS England Policy) and disease progression after
- 8 treatment in line with the NICE technology appraisal guidance on everolimus, the
- 9 only recommended treatment option is NICE technology appraisal guidance on
- 10 <u>cabozantinib</u>.

11 Initial treatment with nivolumab with ipilumumab

- 12 For people who have disease progression after initial treatment in line with the NICE
- 13 <u>technology appraisal guidance on nivolumab with ipilumumab</u>, recommended
- 14 treatment options are the:
- NICE technology appraisal guidance on cabozantinib (NHS England Policy) or
- NICE technology appraisal guidance on everolimus or
- NICE technology appraisal guidance on sunitinib (NHS England Policy) or
- NICE technology appraisal guidance on pazopanib (NHS England Policy) or
- NICE technology appraisal guidance on tivozanib (NHS England Policy).
- 20 For people who have had initial treatment in line with the NICE technology appraisal
- 21 guidance on nivolumab with ipilumumab and have disease progression after
- 22 treatment in line with the NICE technology appraisal guidance on cabozantinib (NHS
- 23 England Policy), recommended treatment options are:
- NICE technology appraisal guidance on lenvatinib with everolimus or
- NICE technology appraisal guidance on everolimus.
- 26 For people who have had initial treatment in line with the NICE technology appraisal
- 27 guidance on nivolumab with ipilumumab and have disease progression after
- 28 treatment in line with the NICE technology appraisal guidance on everolimus, the

- 1 only recommended treatment option is the <u>NICE technology appraisal guidance on</u>
- 2 cabozantinib.
- 3 For people who have had initial treatment in line with the NICE technology appraisal
- 4 guidance on nivolumab with ipilumumab and have disease progression after
- 5 treatment in line with the NICE technology appraisal guidance on sunitinib,
- 6 <u>pazopanib</u> or <u>tivozanib</u> (NHS England Policy), recommended treatment options are:
- 7 NICE technology appraisal guidance on cabozantinib or
- 8 NICE technology appraisal guidance on everolimus or
- NICE technology appraisal guidance on lenvatinib with everolimus.
- 10 For people who have had initial treatment in line with the NICE technology appraisal
- 11 guidance on nivolumab with ipilumumab who have disease progression after
- 12 treatment in line with the NICE technology appraisal guidance on sunitinib,
- 13 <u>pazopanib</u> or <u>tivozanib</u> (NHS England Policy) and disease progression after
- treatment in line with the NICE technology appraisal guidance on cabozantinib, the
- only recommended treatment option is <u>NICE technology appraisal guidance on</u>
- 16 everolimus.
- 17 For people who have had initial treatment in line with the NICE technology appraisal
- 18 guidance on nivolumab with ipilumumab who have disease progression after
- 19 treatment in line with the NICE technology appraisal guidance on sunitinib,
- 20 pazopanib or tivozanib (NHS England Policy) and disease progression after
- 21 treatment in line with the NICE technology appraisal guidance on everolimus, the
- 22 only recommended treatment option is NICE technology appraisal guidance on
- 23 cabozantinib.

24 Initial treatment with avelumab with axitinib

- 25 For people who have disease progression after initial treatment in line with the NICE
- 26 technology appraisal guidance on avelumab with axitinib (managed access through
- the Cancer Drugs Fund), recommended treatment options are the:
- NICE technology appraisal guidance on cabozantinib or
- NICE technology appraisal guidance on lenvatinib with everolimus or
- NICE technology appraisal guidance on everolimus or

- NICE technology appraisal guidance on sunitinib (NHS England Policy) or
- 2 NICE technology appraisal guidance on pazopanib (NHS England Policy) or
- NICE technology appraisal guidance on tivozanib (NHS England Policy).
- 4 For people who have had initial treatment in line with the NICE technology appraisal
- 5 guidance on avelumab with axitinib (managed access through the Cancer Drugs
- 6 Fund) and have disease progression after treatment in line with the NICE technology
- 7 appraisal guidance on cabozantinib, the only recommended treatment option is the
- 8 NICE technology appraisal guidance on everolimus.
- 9 For people who have had initial treatment in line with the NICE technology appraisal
- 10 <u>guidance on avelumab with axitinib</u> (managed access through the Cancer Drugs
- 11 Fund) and have disease progression after treatment in line with the NICE technology
- 12 <u>appraisal guidance on lenvatinib with everolimus</u> or <u>everolimus</u>, the only
- 13 recommended treatment option is the NICE technology appraisal guidance on
- 14 cabozantinib.
- 15 For people who have had initial treatment in line with the NICE technology appraisal
- 16 guidance on avelumab with axitinib (managed access through the Cancer Drugs
- 17 Fund) and have disease progression after treatment in line with the NICE technology
- 18 appraisal guidance on sunitinib, pazopanib or tivozanib (NHS England Policy),
- 19 recommended treatment options are the:
- NICE technology appraisal guidance on cabozantinib or
- NICE technology appraisal guidance on everolimus.
- 22 For people who have had initial treatment in line with the NICE technology appraisal
- 23 guidance on avelumab with axitinib (managed access through the Cancer Drugs
- 24 Fund) who have disease progression after treatment in line with the NICE technology
- 25 appraisal guidance on sunitinib, pazopanib or tivozanib (NHS England Policy) and
- 26 disease progression after treatment in line with the NICE technology appraisal
- 27 guidance on cabozantinib, the only recommended treatment option is the NICE
- 28 technology appraisal guidance on everolimus.
- 29 For people who have had initial treatment in line with the NICE technology appraisal
- 30 guidance on avelumab with axitinib (managed access through the Cancer Drugs

- 1 Fund) who have disease progression after treatment in line with the NICE technology
- 2 <u>appraisal guidance on sunitinib</u>, <u>pazopanib</u> or <u>tivozanib</u> (NHS England Policy) and
- 3 disease progression after treatment in line with the NICE technology appraisal
- 4 <u>guidance on everolimus</u>, the only recommended treatment option is the <u>NICE</u>
- 5 technology appraisal guidance on cabozantinib.

6 Initial treatment with cabozantinib

- 7 For people who have disease progression after initial treatment in line with the NICE
- 8 <u>technology appraisal guidance on cabozantinib</u>, recommended treatment options are
- 9 the:
- NICE technology appraisal guidance on axitinib or
- NICE technology appraisal guidance on lenvatinib with everolimus or
- NICE technology appraisal guidance on everolimus or
- NICE technology appraisal guidance on nivolumab.
- 14 For people who have had initial treatment in line with the NICE technology appraisal
- 15 guidance on cabozantinib and have disease progression after treatment in line with
- 16 the NICE technology appraisal guidance on axitinib, recommended treatment options
- 17 are the:
- NICE technology appraisal guidance on everolimus or
- NICE technology appraisal guidance on nivolumab.
- 20 For people who have had initial treatment in line with the NICE technology appraisal
- 21 guidance on cabozantinib and have disease progression after treatment in line with
- 22 the NICE technology appraisal guidance on lenvatinib with everolimus or everolimus,
- 23 the only recommended treatment option is the NICE technology appraisal guidance
- 24 on nivolumab.
- 25 For people who have had initial treatment in line with the NICE technology appraisal
- 26 guidance on cabozantinib and have disease progression after treatment in line with
- 27 the NICE technology appraisal guidance on nivolumab, recommended treatment
- 28 options are the:
- NICE technology appraisal guidance on axitinib or

- NICE technology appraisal guidance on lenvatinib with everolimus.
- 2 For people who have had initial treatment in line with the NICE technology appraisal
- 3 guidance on cabozantinib who have disease progression after treatment in line with
- 4 the NICE technology appraisal guidance on nivolumab and disease progression after
- 5 treatment in line with the NICE technology appraisal guidance on axitinib, the only
- 6 recommended treatment option is the NICE technology appraisal guidance on
- 7 everolimus.

8 Initial treatment with sunitinib, pazopanib or tivozanib

- 9 For people who have disease progression after initial treatment in line with the NICE
- 10 technology appraisal guidance on sunitinib, pazopanib or tivozanib, recommended
- 11 treatment options are the:
- NICE technology appraisal guidance on cabozantinib or
- NICE technology appraisal guidance on axitinib or
- NICE technology appraisal guidance on lenvatinib with everolimus or
- NICE technology appraisal guidance on everolimus or
- NICE technology appraisal guidance on nivolumab.
- 17 For people who have had initial treatment in line with the NICE technology appraisal
- 18 guidance on sunitinib, pazopanib or tivozanib and have disease progression after
- 19 treatment in line with the NICE technology appraisal guidance on cabozantinib,
- 20 recommended treatment options are the:
- NICE technology appraisal guidance on everolimus or
- NICE technology appraisal guidance on nivolumab.
- 23 For people who have had initial treatment in line with the NICE technology appraisal
- 24 guidance on sunitinib, pazopanib or tivozanib and have disease progression after
- 25 treatment in line with the NICE technology appraisal guidance on axitinib,
- 26 recommended treatment options are the:
- NICE technology appraisal guidance on cabozantinib or
- NICE technology appraisal guidance on everolimus or
- NICE technology appraisal guidance on nivolumab.

- 1 For people who have had initial treatment in line with the NICE technology appraisal
- 2 <u>guidance on sunitinib</u>, <u>pazopanib</u> or <u>tivozanib</u> who have disease progression after
- 3 treatment in line with the NICE technology appraisal guidance on axitinib and
- 4 disease progression after treatment in line with the NICE technology appraisal
- 5 <u>guidance on cabozantinib</u>, the only recommended treatment option is the <u>NICE</u>
- 6 <u>technology appraisal guidance on everolimus</u>.
- 7 For people who have had initial treatment in line with the NICE technology appraisal
- 8 <u>guidance on sunitinib</u>, <u>pazopanib</u> or <u>tivozanib</u> who have disease progression after
- 9 treatment in line with the NICE technology appraisal guidance on axitinib and
- 10 disease progression after treatment in line with the NICE technology appraisal
- 11 guidance on everolimus, the only recommended treatment option is the NICE
- 12 <u>technology appraisal guidance on cabozantinib.</u>
- 13 For people who have had initial treatment in line with the NICE technology appraisal
- 14 <u>guidance on sunitinib, pazopanib</u> or <u>tivozanib</u> and have disease progression after
- 15 treatment in line with the NICE technology appraisal guidance on lenvatinib with
- 16 <u>everolimus</u> or <u>everolimus</u>, recommended treatment options are the:
- NICE technology appraisal guidance on cabozantinib or
- NICE technology appraisal guidance on nivolumab.
- 19 For people who have had initial treatment in line with the NICE technology appraisal
- 20 guidance on sunitinib, pazopanib or tivozanib and have disease progression after
- 21 treatment in line with the NICE technology appraisal guidance on nivolumab.
- 22 recommended treatment options are the:
- NICE technology appraisal guidance on cabozantinib or
- NICE technology appraisal guidance on lenvatinib with everolimus.
- 25 For people who have had initial treatment in line with the NICE technology appraisal
- 26 <u>guidance on sunitinib</u>, <u>pazopanib</u> or <u>tivozanib</u> who have disease progression after
- 27 treatment in line with the NICE technology appraisal guidance on nivolumab and
- 28 disease progression after treatment in line with the NICE technology appraisal
- 29 guidance on cabozantinib, the only recommended treatment option is the NICE
- 30 technology appraisal guidance on everolimus.