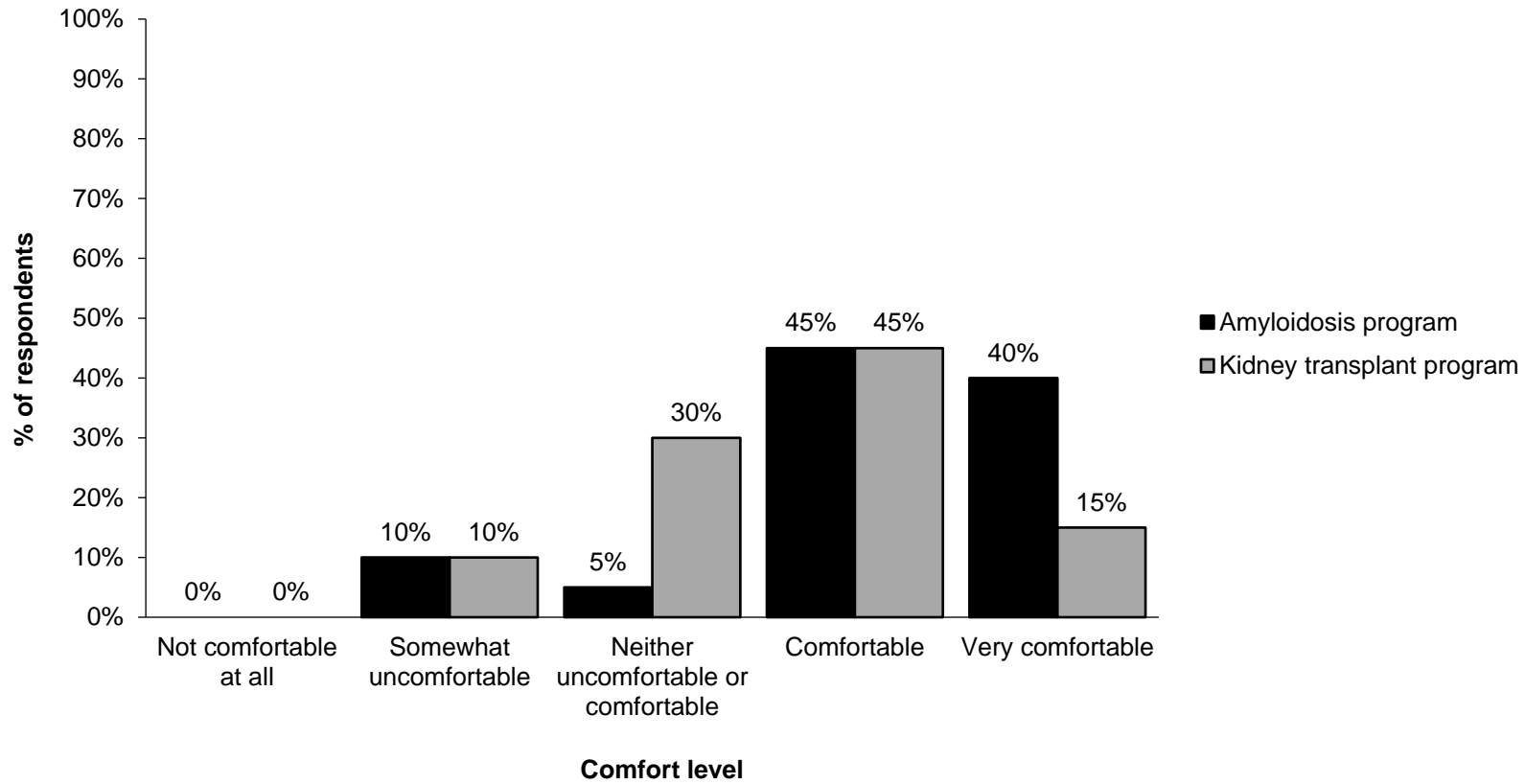
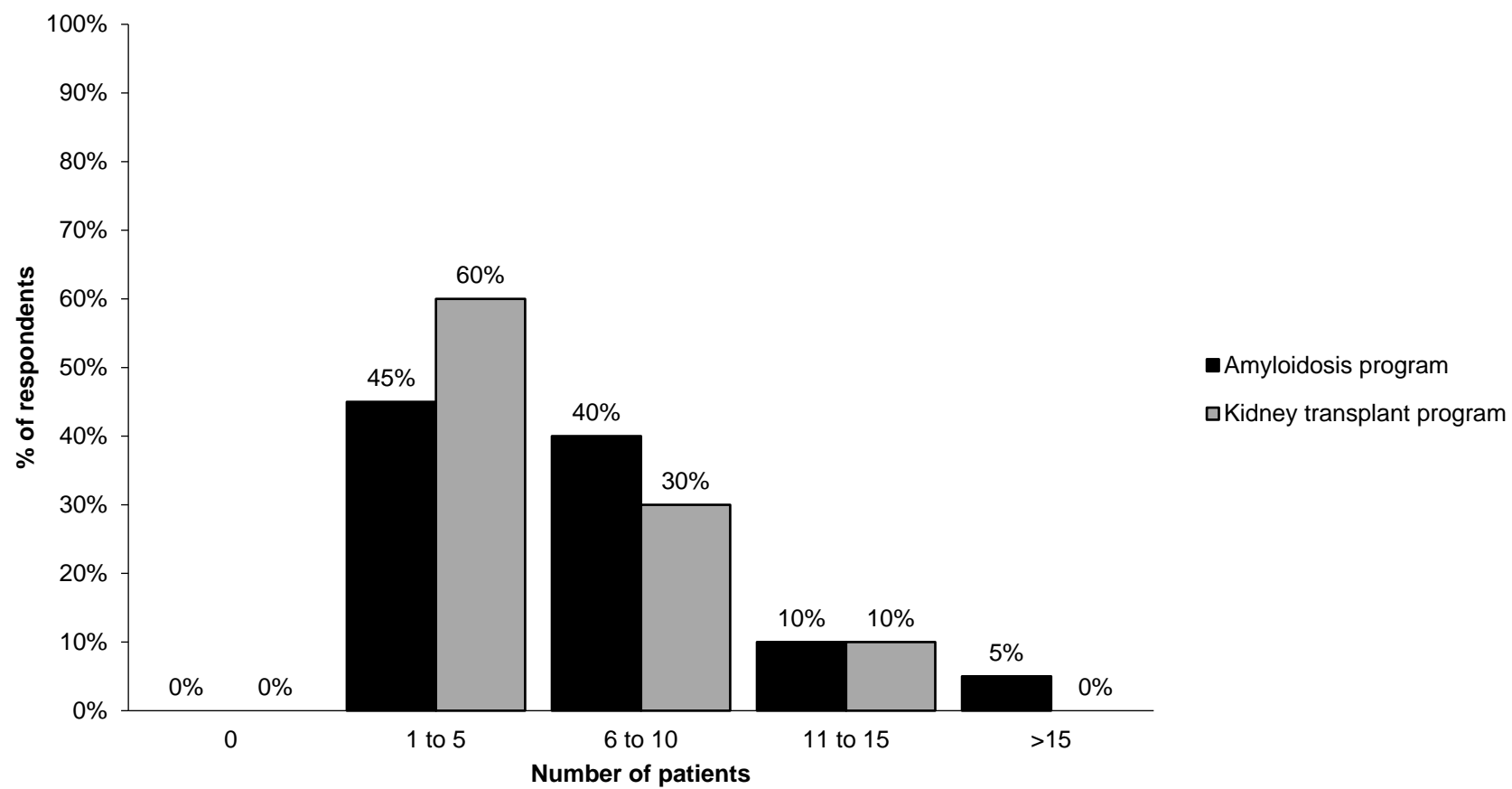


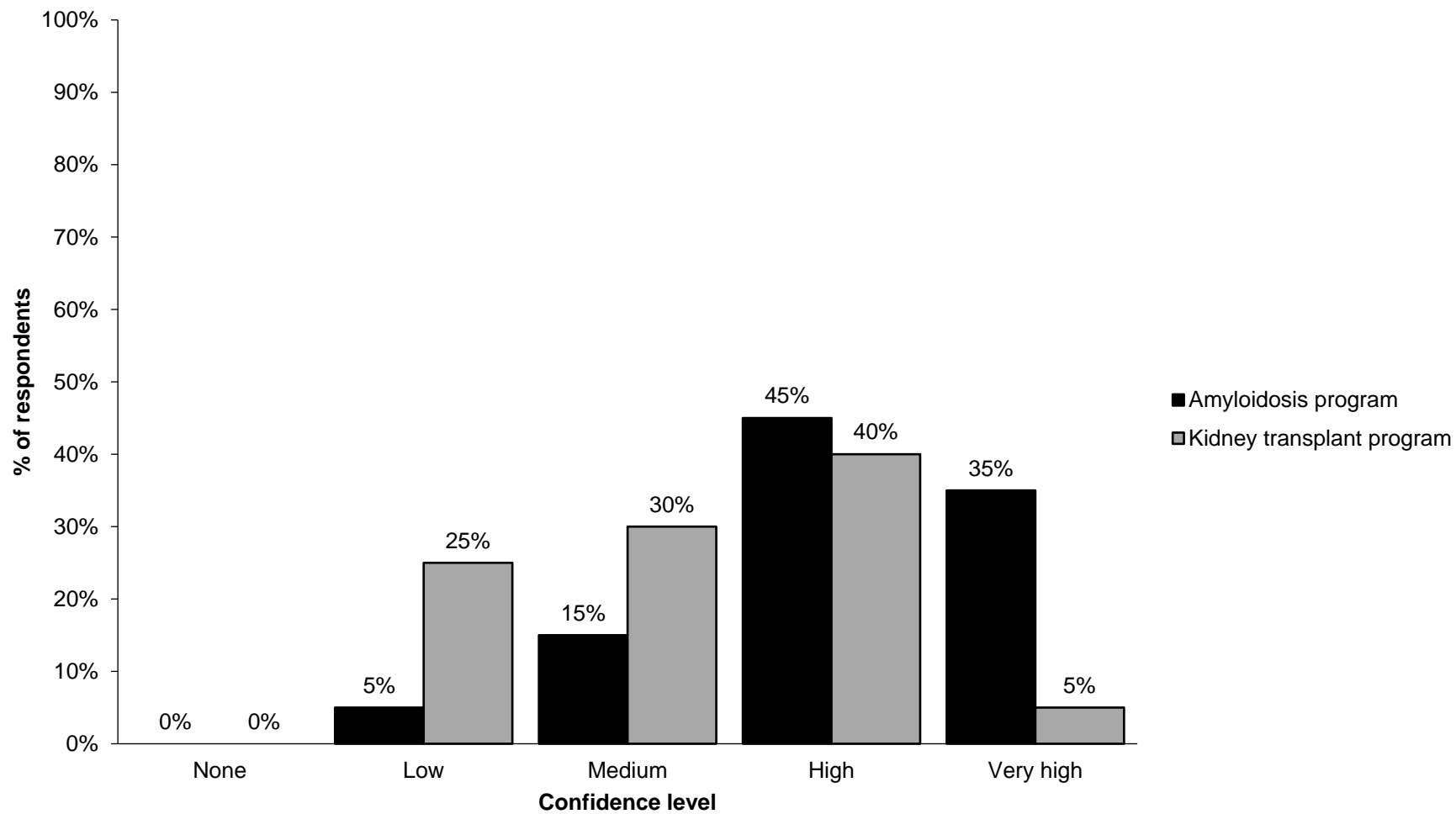
## Supplemental Figures



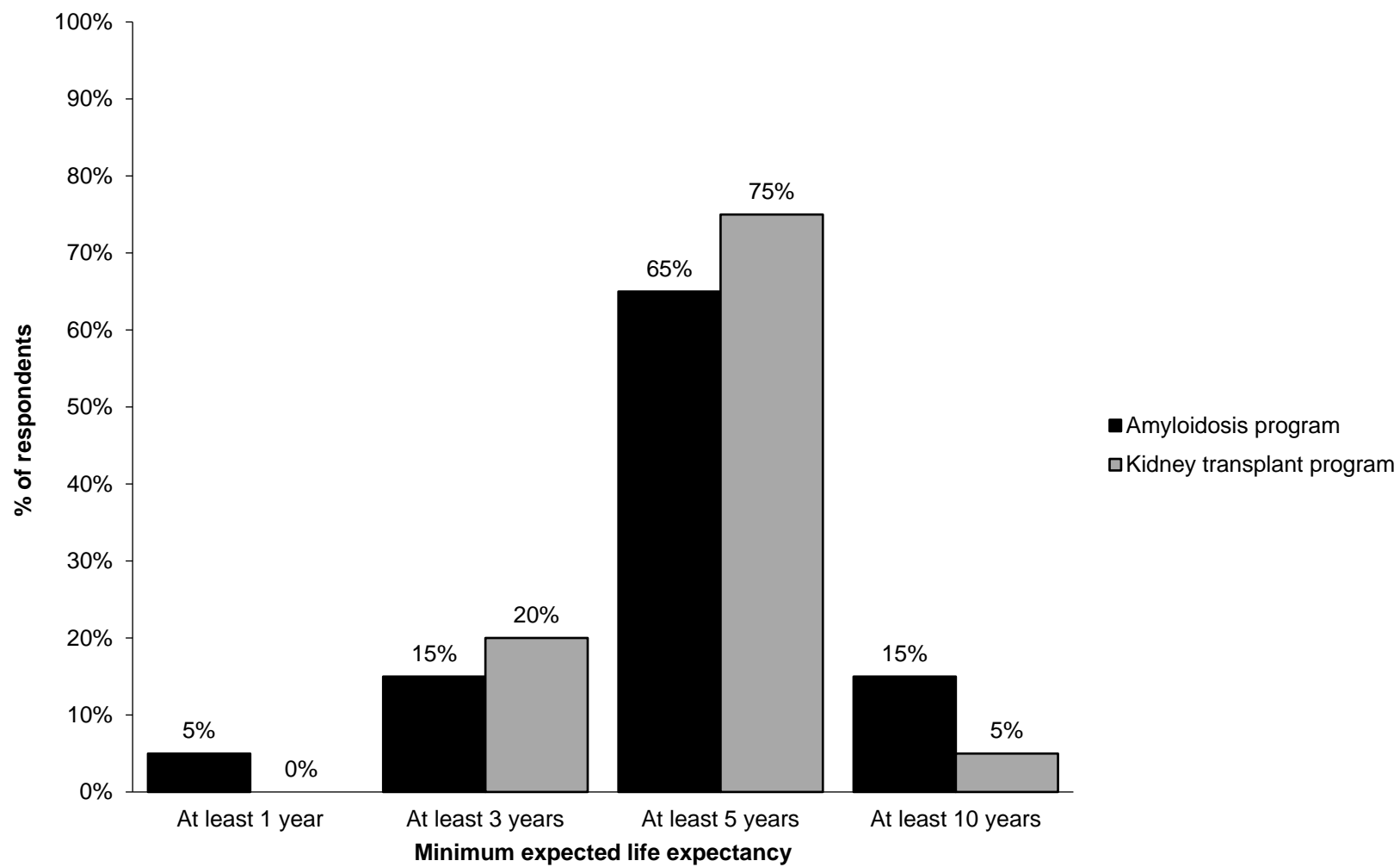
Supplemental Figure 1. Comfort with answering survey questions



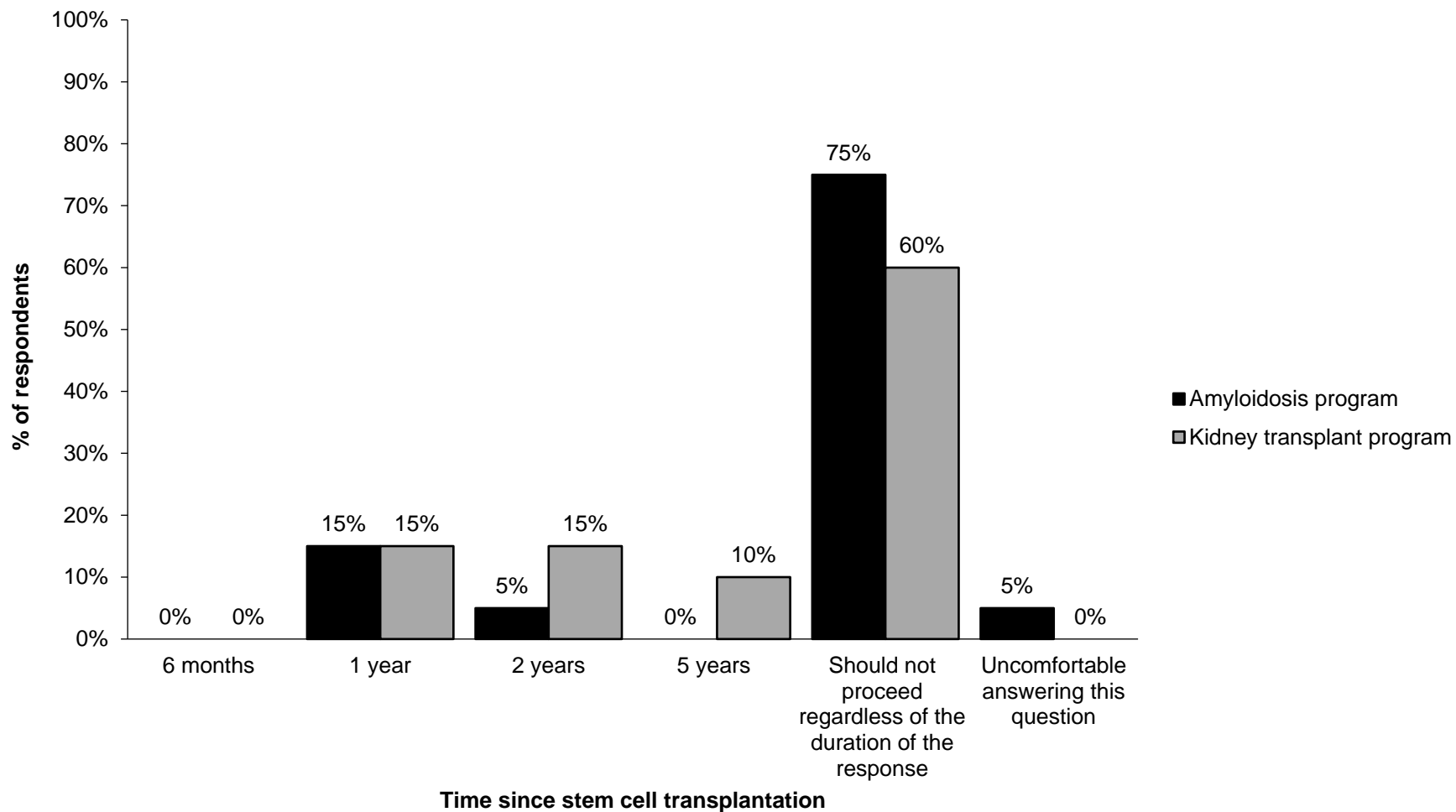
Supplemental Figure 2. Number of patients with amyloidosis evaluated for kidney transplantation during the past 3 years



Supplemental Figure 3. Confidence in evaluating kidney transplantation suitability for patients with AL amyloidosis



Supplemental Figure 4. Minimum expected life expectancy for kidney transplantation suitability



Supplemental Figure 5. Earliest acceptable time for kidney transplantation if there is ongoing evidence of a partial hematologic response after autologous stem cell transplantation for AL amyloidosis

### **Amyloidosis Program Survey**

1. Which of the following best describes your amyloidosis program's affiliation?
  - ☐ Academic medical center
  - ☐ Community hospital, affiliated with an academic medical center
  - ☐ Community hospital, not affiliated with an academic medical center
  - ☐ Veterans Administration hospital
2. How many years has there been an amyloidosis program at your institution?
  - ☐ <5 years
  - ☐ 5-9 years
  - ☐ 10-19 years
  - ☐ >20 years
3. How many physicians are affiliated with your program?
  - ☐ <5
  - ☐ 5-9
  - ☐ 10-19
  - ☐ >20
4. What is your medical specialty?
  - ☐ Hematology-Oncology
  - ☐ Nephrology
  - ☐ Cardiology
  - ☐ Neurology
  - ☐ Gastroenterology
  - ☐ Rheumatology
  - ☐ General internal medicine
  - ☐ Pathology
  - ☐ Other (if selected, free-text option)
5. Does your institution perform autologous stem cell transplantation for patients with AL amyloidosis?
  - ☐ Yes
  - ☐ No
6. How many autologous stem cell transplants for AL amyloidosis have been performed at your institution for the past 2 years?
  - ☐ 0
  - ☐ 1-10
  - ☐ 11-20
  - ☐ 21-50
  - ☐ >50

7. Estimate the number of patients with any type of amyloidosis who were evaluated for kidney transplantation in the past 3 years.
  - ☐ 0
  - ☐ 1-5
  - ☐ 6-10
  - ☐ 11-15
  - ☐ >15
8. Estimate the number of amyloidosis patients with a kidney transplant who have been cared for at your institution in the past 3 years
  - ☐ 0
  - ☐ 1-5
  - ☐ 6-10
  - ☐ >10
9. What is your level of confidence in evaluating a potential kidney transplant recipient with AL amyloidosis?
  - ☐ No confidence
  - ☐ Low confidence
  - ☐ Medium confidence
  - ☐ High confidence
  - ☐ Very high confidence
10. How strongly do you agree or disagree with the following statements?
  - a. Most transplant nephrologists have limited experience evaluating AL amyloidosis patients for kidney transplantation.
  - b. Most transplant nephrologists have limited experience caring for AL amyloidosis patients after kidney transplantation.
  - c. There is greater uncertainty about the outcome of the kidney allograft for patients with AL amyloidosis than for most other kidney transplant recipients.
  - d. There is a consensus among kidney transplant physicians about which patients with AL amyloidosis are suitable kidney transplant recipients.

Options for each statement: Strongly disagree, Disagree, No opinion, Agree, Strongly agree

11. Rank the importance of the following factors when determining the suitability of a patient with AL amyloidosis for kidney transplantation from 1=least important to 5=most important. Drag the text to rearrange the order.

- a. Potential for amyloid deposition in the allograft
- b. Anticipated patient survival
- c. Available therapeutic agents for testing AL amyloidosis after kidney transplantation
- d. Anticipated allograft survival
- e. Effects of transplant immunosuppression on clonal plasma cells

Ranking options: 1, 2, 3, 4, 5

12. How long should a patient with AL amyloidosis be expected to live in order for you to feel comfortable proceeding with kidney transplantation?

- ☐ At least 1 year
- ☐ At least 3 years
- ☐ At least 5 years
- ☐ At least 10 years

13. In your opinion, when is it appropriate to proceed with kidney transplantation? Select the earliest acceptable time.

- ☐ It is acceptable to proceed now (i.e, 6 months following stem cell transplant)
- ☐ It will be acceptable to proceed 1 year after stem cell transplantation if there is still evidence of complete hematologic response.
- ☐ It will be acceptable to proceed 2 years after stem cell transplant if there is still evidence of complete hematologic response.
- ☐ It will be acceptable to proceed 5 years after stem cell transplant if there is still evidence of complete hematologic response.

14. If the 6-month evaluation instead indicates a partial hematologic response, when is it appropriate to proceed with kidney transplantation? Select the earliest time.

- ☐ It is acceptable to proceed now (i.e, 6 months following stem cell transplant)
- ☐ It will be acceptable to proceed 1 year after stem cell transplantation if there is still evidence of partial hematologic response
- ☐ It will be acceptable to proceed 2 years after stem cell transplantation if there is still evidence of partial hematologic response
- ☐ It will be acceptable to proceed 5 years after stem cell transplantation if there is still evidence of partial hematologic response
- ☐ A patient with a partial hematologic remission should not proceed with kidney transplantation regardless of the duration of the response
- ☐ I am not comfortable answering this question



15. In considering eligibility for kidney transplantation, how important is the treatment approach that was used to achieve the patient's current (i.e, pre-kidney transplant) hematologic status?
- Not important at all
  - Somewhat important
  - Important
  - Very important
16. We are interested in understanding whether the type of treatment that led to a complete hematologic response affects your view about subsequent kidney transplantation. Indicate your view about proceeding with kidney transplantation if the complete hematologic response was achieved with each of the treatment approaches shown below.
- a. Bortezomib-based regimen
  - b. Melphalan + autologous stem cell transplantation
  - c. Lenalidomide-based regimen

Ranking options: Unfavorable, Favorable, Highly favorable, Not sufficiently familiar with this treatment

17. What degree of AL amyloid liver disease is acceptable if a patient is to undergo kidney transplantation?
- Mild, defined as histological evidence, but without hepatomegaly or persistent elevation in alkaline phosphatase concentration
  - Moderate, defined as hepatomegaly or persistent elevation in alkaline phosphatase concentration, but without ascites, bilirubin elevation, or impaired hepatic synthetic function
  - Severe, but well-controlled, defined as ascites, bilirubin elevation, or impaired synthetic function, but minimal functional limitations with medical management
  - Severe, but NOT well-controlled, defined as persistent ascites, bilirubin elevation, or impaired synthesis not responsive to medical management
  - None of the above: any evidence of liver involvement precludes consideration for kidney transplantation
18. What degree of AL amyloid cardiac disease is acceptable if a patient is to undergo kidney transplantation?
- Mild, defined as histologic evidence of amyloid, but without echocardiographic evidence of amyloid heart disease
  - Moderate, defined as electrocardiographic and echocardiographic evidence of amyloid heart disease, but with no clinical manifestations or functional limitation
  - Severe but well-controlled, defined as clinically evident disease, but minimal functional limitations with medical management such as diuretics
  - Severe but NOT well-controlled, defined as clinically evident disease with significant functional limitations despite medical management such as diuretics
  - None of the above: any evidence of heart involvement precludes consideration for kidney transplantation

19. If anti-plasma cell therapy is required after kidney transplantation, do you have concerns about a treatment regimen that includes a proteasome inhibitor, such as bortezomib (Velcade)?
- ☐ I do not have concerns
  - ☐ I have some degree of concern, but not enough to prohibit use
  - ☐ I am sufficiently concerned that I would avoid use unless no other options for treatment
  - ☐ I would not use this drug after kidney transplantation
  - ☐ I do not know enough about this drug to answer
20. If anti-plasma cell therapy is required after kidney transplantation, do you have concerns about treatment consisting of high-dose melphalan (alkylating agent) with autologous stem cell transplantation?
- ☐ I do not have concerns
  - ☐ I have some degree of concern, but not enough to prohibit use
  - ☐ I am sufficiently concerned that I would avoid use unless no other options for treatment
  - ☐ I would not use this drug after kidney transplantation
  - ☐ I do not know enough about this drug to answer
21. If anti-plasma cell therapy is required after kidney transplantation, do you have concerns about a treatment regimen that includes an immune modulator, such as lenalidomide (Revlimid)?
- ☐ I do not have concerns
  - ☐ I have some degree of concern, but not enough to prohibit use
  - ☐ I am sufficiently concerned that I would avoid use unless no other options for treatment
  - ☐ I would not use this drug after kidney transplantation
  - ☐ I do not know enough about this drug to answer
22. How comfortable were you answering the questions of this survey?
- ☐ Not comfortable at all
  - ☐ Somewhat comfortable
  - ☐ Neither uncomfortable or comfortable
  - ☐ Comfortable
  - ☐ Very comfortable
23. Comments, questions, or concerns regarding our survey? We would like to hear about it! (Free-text)

**Kidney Transplant Program Survey**

1. Which of the following best describes your kidney transplant program's affiliation?
  - ☐ Academic medical center
  - ☐ Community hospital, affiliated with an academic medical center
  - ☐ Community hospital, not affiliated with an academic medical center
  - ☐ Veterans Administration hospital
2. How many years have kidney transplants have been performed at your institution?
  - ☐ <5 years
  - ☐ 5-9 years
  - ☐ 10-19 years
  - ☐ >20 years
3. How many transplant nephrologists are affiliated with your program?
  - ☐ 1
  - ☐ 2
  - ☐ 3
  - ☐ 4
  - ☐ 5
  - ☐ >5
4. How many kidney transplant surgeons are affiliated with your program?
  - ☐ 1
  - ☐ 2
  - ☐ 3
  - ☐ 4
  - ☐ 5
  - ☐ >5
5. Does your institution have physicians with particular expertise in amyloidosis (the expert might be an oncologist, nephrologist or cardiologist)?
  - ☐ Yes
  - ☐ No
6. Does your healthcare center have an autologous bone marrow/stem cell transplant program?
  - ☐ Yes
  - ☐ No

7. In the past 3 years, estimate the number of patients with amyloidosis that your kidney transplant program evaluated as potential kidney transplant recipients?
  - ☐ 0
  - ☐ 1-5
  - ☐ 6-10
  - ☐ 11-15
  - ☐ >15
8. In the past 3 years, estimate the number of patients with amyloidosis that your kidney transplant program determined to be suitable candidates for kidney transplantation?
  - ☐ 0
  - ☐ 1-5
  - ☐ 6-10
  - ☐ 11-15
  - ☐ >15
9. In the past 3 years, how many amyloidosis patients have undergone kidney transplantation at your institution?
  - ☐ 0
  - ☐ 1-5
  - ☐ 6-10
  - ☐ >10
10. What is your level of confidence in evaluating a potential kidney transplant recipient with AL amyloidosis?
  - ☐ No confidence
  - ☐ Low confidence
  - ☐ Medium confidence
  - ☐ High confidence
  - ☐ Very high confidence
11. How strongly do you agree or disagree with the following statements?
  - a. Most transplant nephrologists have limited experience evaluating AL amyloidosis patients for kidney transplantation.
  - b. Most transplant nephrologists have limited experience caring for AL amyloidosis patients after kidney transplantation.
  - c. There is greater uncertainty about the outcome of the kidney allograft for patients with AL amyloidosis than for most other kidney transplant recipients.
  - d. There is a consensus among kidney transplant physicians about which patients with AL amyloidosis are suitable kidney transplant recipients.

Options for each statement: Strongly disagree, Disagree, No opinion, Agree, Strongly agree

12. Rank the importance of the following factors when determining the suitability of a patient with AL amyloidosis for kidney transplantation from 1=least important to 5=most important. Drag the text to rearrange the order.

- a. Potential for amyloid deposition in the allograft
- b. Anticipated patient survival
- c. Available therapeutic agents for testing AL amyloidosis after kidney transplantation
- d. Anticipated allograft survival
- e. Effects of transplant immunosuppression on clonal plasma cells

Ranking options: 1, 2, 3, 4, 5

13. How long should a patient with AL amyloidosis be expected to live in order for you to feel comfortable proceeding with kidney transplantation?

- ☐ At least 1 year
- ☐ At least 3 years
- ☐ At least 5 years
- ☐ At least 10 years

14. In your opinion, when is it appropriate to proceed with kidney transplantation? Select the earliest acceptable time.

- ☐ It is acceptable to proceed now (i.e, 6 months following stem cell transplant)
- ☐ It will be acceptable to proceed 1 year after stem cell transplantation if there is still evidence of complete hematologic response.
- ☐ It will be acceptable to proceed 2 years after stem cell transplant if there is still evidence of complete hematologic response.
- ☐ It will be acceptable to proceed 5 years after stem cell transplant if there is still evidence of complete hematologic response.

15. If the 6-month evaluation instead indicates a partial hematologic response, when is it appropriate to proceed with kidney transplantation? Select the earliest time.

- ☐ It is acceptable to proceed now (i.e, 6 months following stem cell transplant)
- ☐ It will be acceptable to proceed 1 year after stem cell transplantation if there is still evidence of partial hematologic response
- ☐ It will be acceptable proceed 2 years after stem cell transplantation if there is still evidence of partial hematologic response
- ☐ It will be acceptable to proceed 5 years after stem cell transplantation if there is still evidence of partial hematologic response
- ☐ A patient with a partial hematologic remission should not proceed with kidney transplantation regardless of the duration of the response
- ☐ I am not comfortable answering this question

16. In considering eligibility for kidney transplantation, how important is the treatment approach that was used to achieve the patient's current (i.e, pre-kidney transplant) hematologic status?
- Not important at all
  - Somewhat important
  - Important
  - Very important
17. We are interested in understanding whether the type of treatment that led to a complete hematologic response affect your view about subsequent kidney transplantation. Indicate your view about proceeding with kidney transplantation if the complete hematologic response was achieved with each of the treatment approaches shown below.
- a. Bortezomib-based regimen
  - b. Melphalan + autologous stem cell transplantation
  - c. Lenalidomide-based regimen

Ranking options: Unfavorable, Favorable, Highly favorable, Not sufficiently familiar with this treatment

18. What degree of AL amyloid liver disease is acceptable if a patient is to undergo kidney transplantation?
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  - Severe but well-controlled, defined as clinically evident disease, but minimal functional limitations with medical management such as diuretics
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  - None of the above: any evidence of heart involvement precludes consideration for kidney transplantation

20. If anti-plasma cell therapy is required after kidney transplantation, do you have concerns about a treatment regimen that includes a proteasome inhibitor, such as bortezomib (Velcade)?
- ☐ I do not have concerns
  - ☐ I have some degree of concern, but not enough to prohibit use
  - ☐ I am sufficiently concerned that I would avoid use unless no other options for treatment
  - ☐ I would not use this drug after kidney transplantation
  - ☐ I do not know enough about this drug to answer
21. If anti-plasma cell therapy is required after kidney transplantation, do you have concerns about treatment consisting of high-dose melphalan (alkylating agent) with autologous stem cell transplantation?
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  - ☐ I have some degree of concern, but not enough to prohibit use
  - ☐ I am sufficiently concerned that I would avoid use unless no other options for treatment
  - ☐ I would not use this drug after kidney transplantation
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  - ☐ Neither uncomfortable or comfortable
  - ☐ Comfortable
  - ☐ Very comfortable
24. Comments, questions, or concerns regarding our survey? We would like to hear about it! (Free-text)