

Supplementary Table. Assessment of quality of studies assessing potential risk factors for posttraumatic stress disorder symptoms following solid organ transplantation

| Study | Consecutive transplant patients | Major losses to follow-up (% lost)^a | Descriptions of participants lost to follow-up | Statistical comparisons of participants lost to follow-up | Adjustment for confounding in analyses of potential risk factors for PTSD |
|------------------------------------|----------------------------------------|-------------------------------------------------------|-------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Stukas et al. 1999 [18] | Yes | Yes (13) | Yes | Yes | Yes |
| Dew et al. 2001a [19] | Yes | Yes (29) | Yes | Yes | N/A |
| Dew et al. 2012 [21] | Yes | Yes (21) | Yes | Yes | Yes |
| Fukunishi et al. 2002 [22] | No | No (1) | No | N/A | No |
| Fukunishi et al. 2001 [23] | No | - | - | - | No |
| Possemato et al. 2009 [24] | No | N/A | N/A | N/A | No |
| Cohen et al. 2014 [25] | No | No (0) | N/A | N/A | No |
| Jin et al. 2012 [26] | No | N/A | N/A | N/A | Yes |
| Guimaro et al. 2011 [27] | No | N/A | N/A | N/A | No |
| Possemato et al. 2010 [28] | No | Yes (13) | Yes | Yes | Yes |
| Baranyi et al. 2013 [29] | Yes | No (2) | No | Yes | Yes |
| Gries et al. 2013 [30] | No | N/A | N/A | N/A | Yes |
| Favaro et al. 2011 [33] | No | - | - | - | No |
| Rothenhäusler et al. 2002 [34] | Yes | No (7) | No | Yes | No |
| Bunzel et al. 2007 [35], 2008 [36] | No | N/A | N/A | N/A | No |
| Bunzel et al. 2005 [37] | No | N/A | N/A | N/A | No |
| Total/number of studies | 5/21 (38%) | 4/7 (57%) | 4/7 (57%) | 6/6 (100%) | 6/16 (37%) |

Abbreviations (in alphabetical order): N/A = not-applicable; PTSD = posttraumatic stress disorder; - = not reported.

^a Defined as loss of > 10% of study participants by first post-transplant PTSD symptom assessment.

Supplementary Appendix A. Search strategies

PubMed

(mental disorders[MeSH Terms] OR depress*[Text Word] OR anxi*[Text Word] OR stress[Text Word]) AND (transplants[MeSH Terms] OR transplantation[MeSH Terms]) AND English[Language] NOT review[pt]

PsycInfo

((DE mental disorders) OR (TX “depress” OR “stress” OR “anxi*”)) AND ((DE transplants OR transplantation)) AND (LA English) NOT (PZ Review))

CINAHL Plus

(MH(mental disorders, chronic OR neurotic disorders) OR TX (“depress” OR “stress” OR “anxi*”)) AND (MH(transplants OR transplantation)) AND LA(English)

Cochrane Library

(mental disorders(MeSH) OR depress* OR stress OR anxi*) AND (transplants(MeSH) OR transplantation(MeSH))

Supplementary Appendix B. Journals whose online contents were searched

American Journal of Psychiatry
American Journal of Transplantation
Annals of Transplantation
British Journal of Psychiatry
Clinical Transplantation
General Hospital Psychiatry
Liver Transplantation
JAMA Psychiatry (Archives of General Psychiatry)
Journal of Heart and Lung Transplantation
Journal of Psychosomatic Research
Nephrology Dialysis Transplantation
Psychological Medicine
Psychosomatic Medicine
Psychosomatics
Psychotherapy and Psychosomatics
Transplantation
Transplant International
Transplantation Proceedings

Supplementary Appendix C. Data abstraction tool

POST-TRANSPLANT PSYCHIATRIC OUTCOMES REVIEW DATA ABSTRACTION FORM

Study Title: Authors:

Journal:

Country conducted:

Study Type (e.g., prospective cohort, cross-sectional):

N enrolled:

Follow-up period (Months):

Inclusion Criteria:

Exclusion Criteria:

Consecutive Transplant Admissions (Y/N):

Sex:

Age (Mean, SD):

Race/Ethnicity:

Education:

Marital/Partner Status:

Medical Comorbidity (e.g., Charlson score [Mean, SD], Elixhauser or other list of comorbid medical diagnoses):

Pre-Transplant Psychiatric/Substance Abuse Prevalence (N, %)

Depression:

Anxiety (includes PTSD and other anxiety disorders):

Bipolar disorder:

Schizophrenia:

Other axis I:

Alcohol abuse/dependence:

Drug abuse/dependence:

Method of Pre-Transplant Psychiatric/Substance Abuse Ascertainment:

Pre-Transplant Cognitive Function

Cognitive impairment diagnosis (e.g., dementia, delirium, encephalopathy):

Screening measure (e.g., MMSE):

Neuropsychological testing:

Pre-Transplant ADL/IADL Impairments:

Pre-Transplant HRQOL:

SF-36

PCS:

MCS:

PF:

RP:

BP:

GH:

V:

SF:

RE:

MH:

SIP

Physical Component Score:

Psychosocial Component Score:

EQ-5D:

Time on Transplant Wait List (Years, Months, Days; Mean, SD):

Etiology of organ failure (N, %):

Hospital LOS (Mean, SD OR Median, IQR, Absolute Range):

ICU LOS (Mean, SD OR Median, IQR, Absolute Range):

Duration of Mechanical Ventilation (Mean, SD OR Median, IQR, Absolute Range):

ECMO:

Delirium (How assessed; N & Prevalence):

In-hospital benzodiazepines (dose and duration):

In-hospital opioids (dose and duration):

Psychiatry consult (Y/N):

Other In-Hospital Transplant-Related Clinical Characteristics:

Anti-Rejection Regimen (Duration and dose)

Corticosteroids:

Tacrolimus (FK506):

Sirolimus (Rapamycin):

Other:

Loss to follow-up (N[%]):

Description of patients lost to follow-up:

Statistical comparison of patients lost to follow-up:

Post-Transplant Psychiatry Morbidity

Depression (Method assessed/N(%)):

General anxiety symptoms (Method assessed/N(%)):

PTSD/ASD (Method assessed/N(%)):

Other:

Post-Transplant Cognitive Function

Cognitive impairment diagnosis (e.g., dementia, delirium, encephalopathy):

Screening measure (e.g., MMSE):

Neuropsychological testing:

Post-Transplant ADL/IADL Impairments:

Post-Transplant HRQOL:

SF-36

PCS:

MCS:

PF:

RP:

BP:

GH:

V:

SF:

RE:

MH:

SIP

Physical Component Score:

Psychosocial Component Score:

EQ-5D:

Post-Transplant Mortality (N/%):

Post-Transplant Organ Rejection (N/%):

Post-Transplant Medication Non-Compliance:

Other Post-Transplant Outcomes:

Statistical Analysis Methods

Analytic methods:

Adjustment for confounding:

Risk Factors for Post-Transplant Psych Outcomes (Point estimate, P value):