

## Search strategies utilized

### PubMed:

("Ketamine"[Mesh] OR "Esketamine" [Supplementary Concept] OR "ketamine" OR "esketamine" OR "S-ketamine" OR "R-ketamine") AND ("Palliative Care"[Mesh] OR "Palliative Medicine"[Mesh] OR "Hospice Care"[Mesh] OR "Terminal Care"[Mesh] OR "Hospices"[Mesh] OR "Neoplasms"[Mesh] OR "Dementia"[Mesh] OR "Heart Failure"[Mesh] OR "Pulmonary Disease, Chronic Obstructive"[Mesh] OR "Critical Illness"[Mesh] OR "Neurodegenerative Diseases"[Mesh] OR "palliative" OR "end-of-life" OR "terminal\*" OR "hospice\*" OR "cancer" OR "dementia" OR "Alzheimer\*" OR "heart failure" OR "neurodegenerative" OR "critical" OR "COPD" OR "chronic obstructive pulmonary disease" OR "Renal Insufficiency"[Mesh] OR "renal failure" OR "Kidney Failure, Chronic"[Mesh] OR "Liver Failure"[Mesh] OR "End Stage Liver Disease"[Mesh] OR "liver failure" OR "Amyotrophic Lateral Sclerosis"[Mesh] OR "Amyotrophic Lateral Sclerosis" OR "Motor Neuron Disease"[Mesh] OR "Motor Neuron Disease" OR "Parkinson Disease"[Mesh] OR "Parkinson" OR "Huntington Disease"[Mesh] OR "Huntington" OR "HIV"[Mesh] OR "HIV" OR "Acquired Immunodeficiency Syndrome"[Mesh] OR "AIDS") AND ("Depression"[Mesh] OR "Mood Disorders"[Mesh] OR "Anxiety"[Mesh] OR "Anxiety Disorders"[Mesh] OR "depression" OR "depressi\*" OR "anxiety" OR "suicid\*" OR "mood")

### Web of Science:

TS=("\*ketamine" OR "esketamine" OR "S-ketamine" OR "R-ketamine")

TS=("palliative" OR "end-of-life" OR "terminal\*" OR "hospice\*" OR "cancer" OR "\*dementia\*" OR "Alzheimer\*" OR "heart failure" OR "neurodegenerative" OR "critical" OR "COPD" OR "chronic obstructive pulmonary disease" OR "renal failure" OR "liver failure" OR "Amyotrophic Lateral Sclerosis" OR "Motor Neuron Disease" OR "Parkinson" OR "Huntington Disease" OR "HIV" OR "AIDS")

TS=("depressi\*" OR "anxiety" OR "suicid\*" OR "mood")

#3 AND #2 AND #1

### EMBASE:

('depression'/exp OR depression OR 'central depression' OR 'clinical depression' OR 'depression' OR 'depressive disease' OR 'depressive disorder' OR 'depressive episode' OR 'depressive illness' OR 'depressive state' OR 'depressive symptom' OR 'depressive syndrome' OR 'mental depression' OR 'mood disorder'/exp OR 'affective disorder' OR 'affective disorders' OR 'affective disturbance' OR 'affective illness' OR

'mood disorder' OR 'mood disorders' OR 'mood disturbance' OR 'mood disturbances' OR 'mood'/exp OR 'mood' OR 'psychologic mood' OR 'suicide'/exp OR 'completed suicide' OR 'self killing' OR 'suicidal poisoning' OR 'suicide' OR 'suicide, completed' OR 'suicide attempt'/exp OR 'attempted suicide' OR 'parasuicide' OR 'suicidal attempt' OR 'suicide attempt' OR 'suicide, attempted' OR 'tentamen suicidi' OR 'suicidal behavior'/exp OR 'behavior, suicidal' OR 'behaviour, suicidal' OR 'suicidal behavior' OR 'suicidal behaviour' OR 'suicidality' OR 'suicidal ideation'/exp OR 'ideation, suicidal' OR 'suicidal ideation' OR 'suicidal thought' OR 'suicidal thoughts' OR 'suicide ideation' OR 'anxiety'/exp OR anxiety OR 'anxiety' OR 'anxiety disorder'/exp OR 'anxiety disorder' OR 'anxiety disorders' OR 'dysthymia'/exp OR dysthymia OR 'depression, neurotic' OR 'depressive neurosis' OR 'depressive reaction' OR 'dysthymia' OR 'dysthymic disorder' OR 'fatigue, mental' OR 'mental anorexia' OR 'mental fatigue' OR 'neurotic depression') AND ('palliative therapy'/exp OR 'palliation' OR 'palliative care' OR 'palliative consultation' OR 'palliative medicine' OR 'palliative radiotherapy' OR 'palliative surgery' OR 'palliative therapy' OR 'palliative treatment' OR 'symptomatic treatment' OR 'terminal care'/exp OR 'eol care' OR 'end-of-life care' OR 'terminal care' OR 'critically ill patient'/exp OR 'critically ill' OR 'critically ill patient' OR 'critical illness'/exp OR 'critical illness' OR 'heart failure'/exp OR 'backward failure, heart' OR 'cardiac backward failure' OR 'cardiac decompensation' OR 'cardiac failure' OR 'cardiac incompetence' OR 'cardiac insufficiency' OR 'cardiac stand still' OR 'cardial decompensation' OR 'cardial insufficiency' OR 'chronic heart failure' OR 'chronic heart insufficiency' OR 'decompensatio cordis' OR 'decompensation, heart' OR 'heart backward failure' OR 'heart decompensation' OR 'heart failure' OR 'heart incompetence' OR 'heart insufficiency' OR 'insufficiencia cordis' OR 'myocardial failure' OR 'myocardial insufficiency' OR 'chronic obstructive lung disease'/exp OR 'chronic airflow obstruction' OR 'chronic airway obstruction' OR 'chronic obstructive bronchitis' OR 'chronic obstructive bronchopulmonary disease' OR 'chronic obstructive lung disease' OR 'chronic obstructive lung disorder' OR 'chronic obstructive pulmonary disease' OR 'chronic obstructive pulmonary disorder' OR 'chronic obstructive respiratory disease' OR 'copd' OR 'lung chronic obstructive disease' OR 'lung disease, chronic obstructive' OR 'lung diseases, obstructive' OR 'obstructive lung disease' OR 'obstructive lung disease, chronic' OR 'obstructive lung diseases' OR 'obstructive pulmonary disease' OR 'obstructive respiratory disease' OR 'obstructive respiratory tract disease' OR 'pulmonary disease, chronic obstructive' OR 'pulmonary disorder, chronic obstructive' OR 'dementia'/exp OR dementia OR 'amentia' OR 'dementia' OR 'demention' OR 'alzheimer disease'/exp OR 'alzeimer disease' OR 'alzeimer`s disease' OR 'alzeimers disease' OR 'alzheimer dementia' OR 'alzheimer disease' OR 'alzheimer`s disease' OR 'alzheimer fibrillary change' OR 'alzheimer fibrillary lesion' OR 'alzheimer neurofibrillary change' OR 'alzheimer neurofibrillary degeneration' OR 'alzheimer neuron degeneration' OR 'alzheimer perusini disease' OR 'alzheimer sclerosis' OR 'alzheimer syndrome' OR 'alzheimer`s disease' OR 'cortical sclerosis, diffuse' OR 'dementia, alzheimer' OR 'diffuse cortical sclerosis' OR 'late onset alzheimer disease' OR 'malignant neoplasm'/exp OR 'cancer' OR 'cancers' OR 'malignant neoplasia' OR 'malignant neoplasm' OR 'malignant neoplastic disease' OR 'malignant tumor' OR 'malignant tumour' OR 'neoplasia, malignant' OR 'tumor, malignant' OR 'tumour, malignant' OR 'degenerative disease'/exp OR 'degenerative disease' OR 'neurodegenerative disease' OR 'neurodegenerative diseases' OR 'hospice'/exp OR hospice OR 'hospice' OR 'hospices' OR 'hospice care'/exp OR 'hospice care' OR 'kidney failure'/exp OR 'kidney insufficiency' OR 'maternal kidney failure' OR 'renal failure' OR 'renal insufficiency' OR 'terminal kidney failure' OR 'kidney failure' OR 'liver failure'/exp OR 'hepatic failure' OR 'hepatic insufficiency' OR 'liver insufficiency' OR 'liver failure' OR 'amyotrophic lateral sclerosis'/exp OR 'als (amyotrophic lateral sclerosis)'

OR 'lou gehrig disease' OR 'lou gehrig`s disease' OR 'als dementia' OR 'lateral sclerosis, amyotrophic' OR 'sclerosis, amyotrophic lateral' OR 'amyotrophic lateral sclerosis' OR 'motor neuron disease'/exp OR 'motoneuron disease' OR 'motor neurone disease' OR 'motor system disease' OR 'motor neuron disease' OR 'parkinson disease'/exp OR 'parkinson`s disease' OR 'parkinsons disease' OR 'paralysis agitans' OR 'parkinson dementia complex' OR 'parkinson disease, postencephalitic' OR 'parkinson disease, secondary' OR 'parkinson disease, symptomatic' OR 'postencephalitic parkinson disease' OR 'secondary parkinson disease' OR 'symptomatic parkinson disease' OR 'parkinson disease' OR 'huntington chorea'/exp OR 'huntington chorea' OR 'huntington`s chorea' OR 'huntington`s disease' OR 'chorea huntington' OR 'chorea major' OR 'chorea, huntington' OR 'chronic progressive chorea' OR 'hereditary chorea' OR 'juvenile chorea' OR 'huntington disease' OR 'human immunodeficiency virus'/exp OR 'aids virus' OR 'hiv' OR 'human immuno deficiency virus' OR 'human immunodeficiency virus' OR 'lav (aids)' OR 'lymphadenopathy associated virus' OR 'aids associated lentivirus' OR 'aids associated retrovirus' OR 'aids associated virus' OR 'aids related virus' OR 'immunodeficiency associated virus' OR 'immunodeficiency viruses, primate' OR 'lav' OR 'lymphadenopathy associated retrovirus' OR 'virus, lymphadenopathy associated' OR hiv OR 'acquired immune deficiency syndrome'/exp OR 'aids' OR 'acquired immune deficiency syndrome' OR 'acquired immunodeficiency syndrome' OR 'immunodeficiency, acquired' OR aids) AND ('ketamine'/exp OR ketamine OR '2 (2 chlorophenyl) 2 (methylamino) cyclohexanone' OR '2 (2 chlorophenyl) 2 (methylamino) cyclohexanone hydrochloride' OR '2 (2 chlorophenyl) 2 methylaminocyclohexanone' OR '2 (methylamino) 2 (2 chlorophenyl) cyclohexanone' OR '2 (ortho chlorophenyl) 2 (methylamino) cyclohexanone' OR '2 (ortho chlorophenyl) 2 methylaminocyclohexanone' OR '2 (ortho chlorophenyl) 2 methylaminocyclohexanone hydrochloride' OR '2 methylamino 2 (2 chlorophenyl) cyclohexanone' OR '2 ortho chlorophenyl 2 methylaminocyclohexanone' OR 'anesject' OR 'calipsol' OR 'calypsol' OR 'ci 581' OR 'ci581' OR 'cl 369' OR 'cl369' OR 'cn 52, 372 2' OR 'cn 52372 2' OR 'cn 523722' OR 'cn52, 372 2' OR 'cn52372 2' OR 'cn523722' OR 'imalgene' OR 'kalipsol' OR 'katamine' OR 'keta-hameln' OR 'ketaject' OR 'ketalar' OR 'ketalin' OR 'ketamax' OR 'ketamine' OR 'ketamine hcl' OR 'ketamine hydrochloride' OR 'ketaminol vet' OR 'ketanest' OR 'ketased' OR 'ketaset' OR 'ketaved' OR 'ketavet' OR 'ketmin' OR 'ketoject' OR 'ketolar' OR 'narkamon' OR 'narketan' OR 'soon-soon' OR 'tekam' OR 'velonarcon' OR 'vetalar' OR 'esketamine'/exp OR esketamine OR 'esketamine' OR 'esketamine hydrochloride' OR 'jnj 54135419' OR 'jnj 5419' OR 'jnj54135419' OR 'jnj5419' OR 'ketanest s' OR 'pg 061' OR 'pg061' OR 's ketamin' OR 's ketamine' OR 's-ketamin' OR 'spravato' OR 'vesierra')

## SCOPUS:

TITLE-ABS-KEY ( "ketamine" OR "esketamine" ) AND TITLE-ABS-KEY ( "palliative" OR "end-of-life" OR "terminal\*" OR "hospice\*" OR "terminal\*" OR "cancer" OR "dementia" OR "Alzheimer\*" OR "heart failure" OR "neurodegenerative" OR "critical" OR "COPD" OR "chronic obstructive pulmonary disease" OR "renal failure" OR "liver failure" OR "Amyotrophic Lateral Sclerosis" OR "Motor Neuron Disease" OR "Parkinson" OR "Huntington Disease" OR "HIV" OR "AIDS") AND TITLE-ABS-KEY ( "depression" OR "depressi\*" OR "anxiety" OR "suicid\*" OR "mood" )

### PsycInfo:

**Index Terms:** ({Ketamine} OR **Any Field:** "\*ketamine" OR "esketamine" OR "S-ketamine" OR "R-ketamine") **AND Index Terms:** ({Depression (Emotion)} OR {Endogenous Depression} OR {Atypical Depression} OR {Late Life Depression} OR {Major Depression} OR {Affective Disorders} OR {Attempted Suicide} OR {Suicide} OR {Anxiety} OR {Anxiety Disorders} OR {Generalized Anxiety Disorder} OR **Any Field:** "depressi\*" OR **Any Field:** "suicid\*" OR **Any Field:** "anxi\*" OR **Any Field:** "mood") **AND Index Terms:** ({Palliative Care} OR {Terminal Cancer} OR {Terminally Ill Patients} OR {Hospice} OR {Terminal Cancer} OR {Neoplasms} OR {Alzheimer's Disease} OR {Dementia} OR {Chronic Obstructive Pulmonary Disease} OR {Neurodegenerative Diseases} OR {Amyotrophic Lateral Sclerosis} OR {Parkinson's Disease} OR {Huntingtons Disease} OR {Hiv} OR {Aids} OR **Any Field:** "palliative" OR **Any Field:** "end-of-life" OR **Any Field:** "terminal\*" OR **Any Field:** "hospice\*" OR **Any Field:** "cancer" OR **Any Field:** "\*\*dementia\*" OR **Any Field:** "Alzheimer\*" OR **Any Field:** "heart failure" OR **Any Field:** "neurodegenerative" OR **Any Field:** "critical" OR **Any Field:** "COPD" OR **Any Field:** "chronic obstructive pulmonary disease" OR **Any Field:** "renal failure" OR **Any Field:** "liver failure" OR **Any Field:** "Amyotrophic Lateral Sclerosis" OR **Any Field:** "Motor Neuron Disease" OR **Any Field:** "Parkinson" OR **Any Field:** "Huntington Disease" OR **Any Field:** "HIV" OR **Any Field:** "AIDS")

### Cochrane:

ID	Search
#1	MeSH descriptor: [Ketamine] explode all trees
#2	ketamine
#3	esketamine
#4	r-ketamine
#5	MeSH descriptor: [Depression] 1 tree(s) exploded
#6	MeSH descriptor: [Depressive Disorder] explode all trees
#7	MeSH descriptor: [Mood Disorders] explode all trees

- #8 MeSH descriptor: [Suicide] explode all trees
- #9 MeSH descriptor: [Anxiety] explode all trees
- #10 MeSH descriptor: [Anxiety Disorders] explode all trees
- #11 depressi\*
- #12 anxi\*
- #13 mood
- #14 suicid\*
- #15 MeSH descriptor: [Palliative Care] explode all trees
- #16 MeSH descriptor: [Hospices] explode all trees
- #17 MeSH descriptor: [Hospice Care] explode all trees
- #18 MeSH descriptor: [Palliative Medicine] explode all trees
- #19 MeSH descriptor: [Terminal Care] explode all trees
- #20 palliative
- #21 end-of-life
- #22 terminal
- #23 cancer
- #24 MeSH descriptor: [Neoplasms] explode all trees
- #25 MeSH descriptor: [Dementia] explode all trees
- #26 MeSH descriptor: [Heart Failure] explode all trees
- #27 MeSH descriptor: [Critical Illness] explode all trees

- #28 MeSH descriptor: [Pulmonary Disease, Chronic Obstructive] 1 tree(s) exploded
- #29 MeSH descriptor: [Neurodegenerative Diseases] explode all trees
- #30 cancer
- #31 dementia
- #32 Alzheimer\*
- #33 heart failure
- #34 COPD
- #35 Chronic Obstructive Pulmonary Disease
- #36 degenerative
- #37 neurodegenerative
- #38 renal failure
- #39 MeSH descriptor: [Renal Insufficiency] 2 tree(s) exploded
- #40 liver failure
- #41 MeSH descriptor: [Liver Failure] explode all trees
- #42 Amyotrophic Lateral Sclerosis
- #43 Motor Neuron Disease
- #44 MeSH descriptor: [Amyotrophic Lateral Sclerosis] explode all trees
- #45 MeSH descriptor: [Motor Neuron Disease] explode all trees
- #46 Parkinson
- #47 MeSH descriptor: [Parkinson Disease] explode all trees

- #48 Huntington
- #49 MeSH descriptor: [Huntington Disease] explode all trees
- #50 HIV
- #51 AIDS
- #52 MeSH descriptor: [HIV] explode all trees
- #53 MeSH descriptor: [Acquired Immunodeficiency Syndrome] 7 tree(s) exploded
- #54 stroke
- #55 MeSH descriptor: [Stroke] explode all trees
- #56 {OR #1-#4}
- #57 {OR #5-#14}
- #58 {OR #15-#55}
- #59 {AND #56-#58}

**Clinicaltrials.gov:**

( EXPAND[Concept] "ketamine" OR "esketamine" OR "S-ketamine" OR "R-ketamine" ) AND ( EXPAND[Concept] "palliative" OR EXPAND[Concept] "end-of-life" OR EXPAND[Concept] "terminal\*" OR EXPAND[Concept] "hospice\*" OR EXPAND[Concept] "cancer" OR "dementia" OR "Alzheimer\*" OR "heart failure" OR EXPAND[Concept] "neurodegenerative" OR EXPAND[Concept] "critical" OR EXPAND[Concept] "COPD" OR EXPAND[Concept] "chronic obstructive pulmonary disease" ) AND ( EXPAND[Concept] "depression" OR EXPAND[Concept] "depressi\*" OR EXPAND[Concept] "anxiety" OR EXPAND[Concept] "suicid\*" OR "mood" )