PAYOR PERSPECTIVE

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Past member of ZIN, Health Council; present member JCVI & WHO-committees

Receives(d) grants and honoraria from various pharmaceutical companies, inclusive those developing, producing and marketing ADDs

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DIFFERENCES REGISTRATION AND REIMBURSEMENT AUTHORITIES

- Obviously, payors look at economics
  - Cost/QALY or LY
  - Budget impact
- Often, different interpretation/preference of/in outcomes
  - Hard endpoints (HB_1AC vs hypos or CV-events)
  - 2nd endpoint can sometimes be preferred over primary
  - Subanalyses required/preferred
- Precise alignment of claim and trial
  - Line of treatment
  - Patient inclusion
- Discussion on comparator
  - Placebo often not considered adequate
  - Related to line of treatment and clinical guidelines

WHAT DOES THIS MEAN FOR SUICIDE/SUICIDAL IDIATION?

- Ideally a trial would be large
  - To measure differences in early suicides
  - Or a reduction being measured in an intermediate variable with a strong relation
- Obviously, in economics modelling is accepted
  - From biomarkers to hard endpoint
  - From trial period to lifetime
  - Room for creativity / various ways: implicitly, explicitly…
- Real-world evidence is accepted
  - Trials remain core
  - Additionally/to confirm, e.g., in conditional reimbursement
- Two examples
  - ICER and self-help
  - Types of models, outcomes, cost-effectiveness…

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ICER
INSTITUTE FOR CLINICAL AND ECONOMIC REVIEW

Esketamine for the Treatment of Treatment-Resistant Depression: Effectiveness and Value

Final Evidence Report

June 20, 2019

Prepared for

AN ICER PROGRAM
MIDWEST CEPAC
COMPARATIVE EFFECTIVENESS PUBLIC ADVISORY COUNCIL

Table 4.11. Base-Case Results Comparing Esketamine to No Additional Treatment in Patients with TRD

Treatment Pathways	Drug Cost	Total Cost	QALYs	LYs	Depression-Free Days
Esketamine plus Background Antidepressant	$42,600	$448,600	12.66	20.66	235 (two years) 373 (lifetime)
Background Antidepressant	$0	$410,200	12.47	20.64	117 (two years) 123 (lifetime)
Difference	$42,600	$38,400	0.19	0.01	117 (two years) 250 (lifetime)

QALY: quality-adjusted life year, LY: life year

Table 4.12. Incremental Cost-Effectiveness Ratios for the Base-Case Analysis

Treatment Pathways	Cost Per QALY Gained	Cost Per LY Gained	Cost Per Depression-Free Day
Esketamine plus Background Antidepressant vs. Background Antidepressant	$198,000	$2,592,000	$330 (two years) $150 (lifetime)

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Table 4.6. Mortality Inputs

Parameter	Value	Source
Annual All-Cause Mortality	Varies by age and gender	USA Human Mortality Database[102]
Male, 46 Years Old (33% of patients)	0.35%	
Female, 46 Years Old (67% of patients)	0.22%	
Weighted Average, 46 Years Old	0.27%	
Adjusted Excess Mortality Rate Ratios for Patients with TRD		Ruetfors 2018[45]
Age		
18-29 Years	2.20	
30-49 Years	1.62	
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JOURNAL OF MEDICAL INTERNET RESEARCH

Original Paper

Reducing Suicidal Ideation: Cost-Effectiveness Analysis of a Randomized Controlled Trial of Unguided Web-Based Self-help

Bregje A.J van Spijker[1], PhD; M. Cristina Majo[2], PhD; Filip Smit[2,3], PhD; Annemieke van Straten[1], PhD; Ad J.F.M Kerkhof[1], PhD

[1]Department of Clinical Psychology and the EMGO+ Institute for Health and Care Research, Faculty of Psychology and Education, VU University Amsterdam, Amsterdam, Netherlands

[2]Trimbos Institute, Netherlands Institute of Mental Health and Addiction, Utrecht, Netherlands

[3]Department of Epidemiology and Biostatistics, EMGO+ Institute for Health and Care Research, VU University Medical Centre, Amsterdam, Netherlands

Table 5. Sensitivity analysis of the incremental cost-effectiveness for different scenarios.

Sensitivity analysis	Standard self-help intervention	Scenario		
		A[a]	B[b]	C[c]
Cost, €[d]	−5039	−4900	−4746	−4592
Effect	0.15	0.15	0.15	0.15
incremental cost-effectiveness ratio, median €[e]	−33,593	−32,342	−32,708	−31,647
Distribution on the cost-effectiveness plane				
1st quadrant (northeast)	0.06	0.06	0.06	0.08
2nd quadrant (inferior: northwest)	0.00	0.00	0.00	0.00
3rd quadrant (southwest)	0.02	0.01	0.02	0.01
4th quadrant (dominant: southeast)	0.91	0.92	0.90	0.89
Willingness to pay ceiling, %				
€0	93	93	93	93
€10,000	90	90	91	88
€20,000	96	95	96	94
€30,000	98	99	99	99

- WEB-BASED SELF-HELP

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CLOSING REMARKS

- Strong preference for hard endpoints
  - Suicide over suicidal idiation
  - QALYs using/related to EQ-5D 3L/5L
- Modelling can help
  - Be as explicit as possible
  - Should build on the evidence / claims for the product
  - Have the economic model 100% aligned with the clinical value dossier
- Additional questions
  - What is the adequate comparator?
  - Long-term considerations
- Solutions
  - Managed Entry Agreements (registry, conditional reimbursement, no-cure/no-pay)
  - Minimizing budget impact (limiting patient population in size and/or over time)