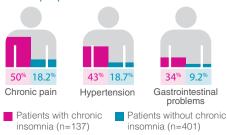
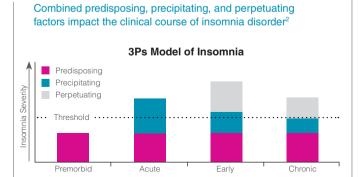


Insomnia Disorder: Prevalence and Pathophysiology

Comorbid medical conditions are more prevalent in people with chronic insomnia than in people without insomnia*1



*538 community-based individuals participated in a health survey and self-reported sleep habits and comorbid medical conditions



Burden of Insomnia Disorder

Retrospective data from CMS Chronic Condition Data Warehouse showed higher annual per-patient healthcare costs for Medicare beneficiaries in 2013 with untreated insomnia (n=151,668) vs. non–sleep-disordered controls (n=333,039)³

\$142,586

Total all-cause per-patient costs in the year prior to insomnia diagnosis among insomnia patients

-\$56,346

Total all-cause per-patient costs among patients without insomnia

\$86,240

Increase in total all-cause per-patient healthcare costs among patients with untreated insomnia

Mechanisms of Sleep-Wake Physiology⁴⁻⁷

Distinct neurotransmitters regulate sleep-wake behavior, aligned to the 24-hr circadian clock

Sleep-wake behavior is regulated by interaction of a Two-Process Model⁴:

- S-Process: Homeostatic (represented by sleep pressure)
- C-Process: Circadian

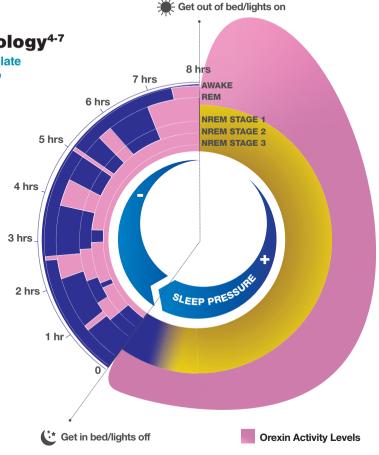
Orexin neurotransmitter activity is key to sleep-wake regulation:

 Orexin activity is highest during active wake behavior, decreases during non-active wake and sleep behaviors, and is lowest during NREM Stage 3 sleep (also called slow-wave sleep)⁷

hr(s) = hour(s) of time in bed REM = rapid eye movement sleep NREM = non-rapid eye movement sleep



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Clinical Management of Insomnia

A community-based survey of adults >65 years old (N=242)

Patient Challenges



of patients with insomnia may consult with an HCP, and symptoms may frequently be missed⁸ A survey of primary care providers (N=51) from VA facilities in the Mid-Atlantic region of the US

HCP Challenges



of surveyed VA healthcare providers in the primary care setting formally documented insomnia symptoms⁹

Shared Decision Making (SDM)

SDM involves conversational analysis and neutral hypotheses to provide several options and facilitate a common decision¹⁰



Improvement in the HCP-patient dialogue is necessary to optimize insomnia diagnosis and treatment



Many patients with insomnia prioritize investing time in treatment and sustained therapeutic gains over short-term improvement¹¹



About Eisai Inc.

At Eisai Inc., human health care (hhc) is our goal. We give our first thoughts to patients and their families and helping to increase the benefits health care provides. As the U.S. pharmaceutical subsidiary of Tokyo-based Eisai Co., Ltd., we have a passionate commitment to patient care that is the driving force behind our efforts to discover and develop innovative therapies to help address unmet medical needs.

Eisai is a fully integrated pharmaceutical business that operates in two global business groups: oncology and neurology (dementia-related diseases and neurodegenerative diseases). Our U.S. headquarters, commercial, and clinical development organizations are located in New Jersey; our discovery labs are in Massachusetts and Pennsylvania; and our global demand chain organization resides in Maryland and North Carolina. To learn more about Eisai Inc., please visit us at www.eisai.com/US and follow us on Twitter and LinkedIn.

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