

CHARACTERISTICS OF INFUSION-RELATED REACTIONS TO LECANEMAB IN EARLY ALZHEIMER'S DISEASE: A MULTICENTER REAL-WORLD STUDY IN NORTHWESTERN CHINA

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Background

- Lecanemab is the first drug approved by the FDA for the treatment of early Alzheimer's disease (AD). Infusion-related reactions (IRRs) represent the most common adverse events associated with Lecanemab. However, real-world data on IRR characteristics and risk factors in Asian populations, particularly Chinese, remain scarce.

Methods

- Study design:** Multicenter prospective registry study.
- Participants:** 139 patients with early AD receiving lecanemab.
- Outcome assessment:** IRRs were confirmed by physicians. Multivariable logistic regression was used to identify independent predictors.

Results

- A total of 139 patients from 13 hospitals in Northwestern China received lecanemab therapy between July 2024 and September 2025.
- The cumulative IRR incidence was 12.36%, highest at the first infusion (17.3%) and decreased significantly thereafter ($P < 0.001$). Fever (54.2%) and dizziness (16.7%) were the most common symptoms (**Figure 1**).

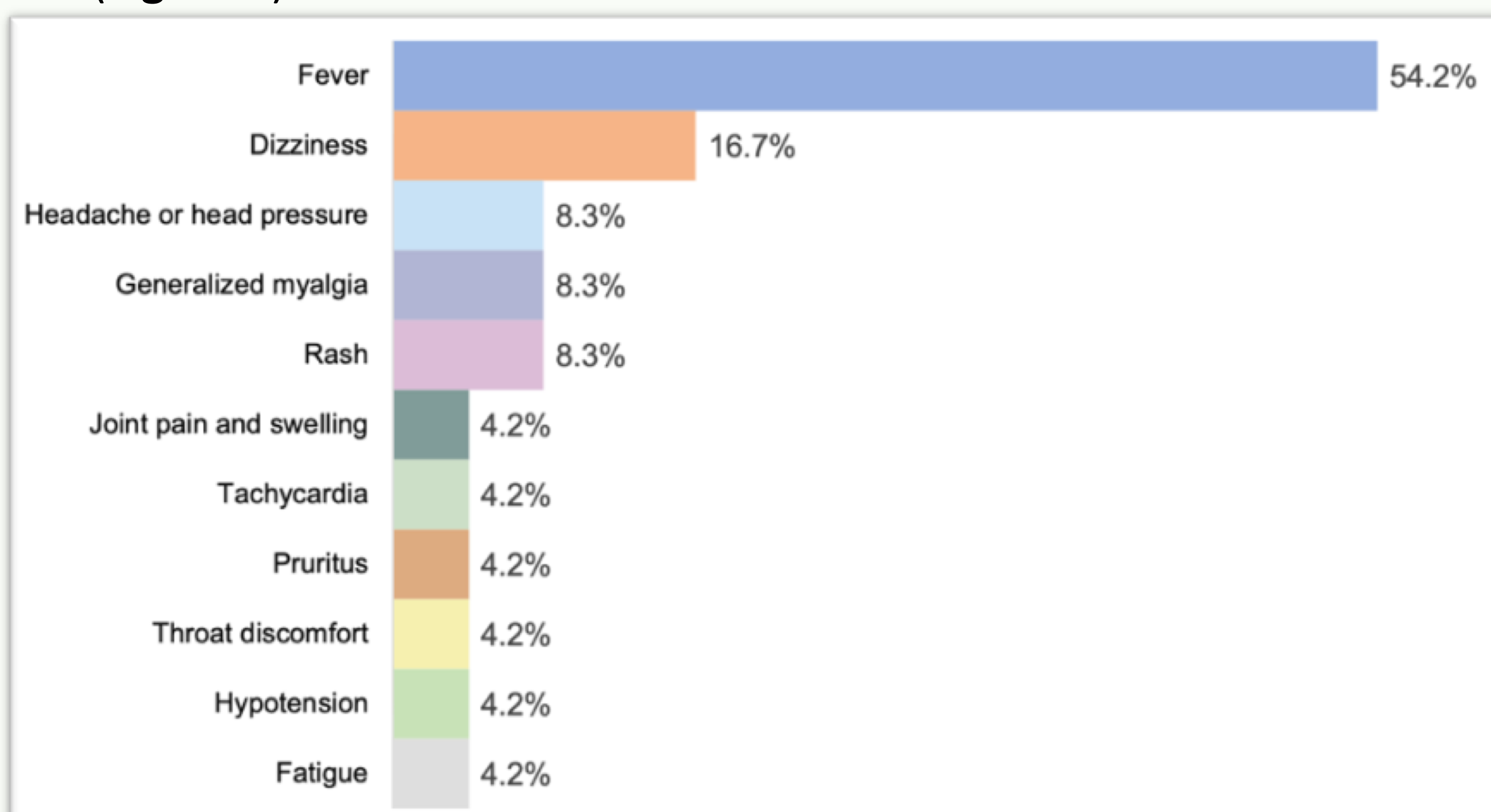


Figure 1. Clinical manifestations of IRR during the first lecanemab infusion. Data represent the proportion of patients experiencing each symptom (n = 24 patients).

- The majority of IRRs (45.8%) occurred in the 2–24 hours window post-infusion. Only 20.8% of events were observed during the infusion itself. All IRRs were mild (Grade 1) and self-limited (**Figure 2**).

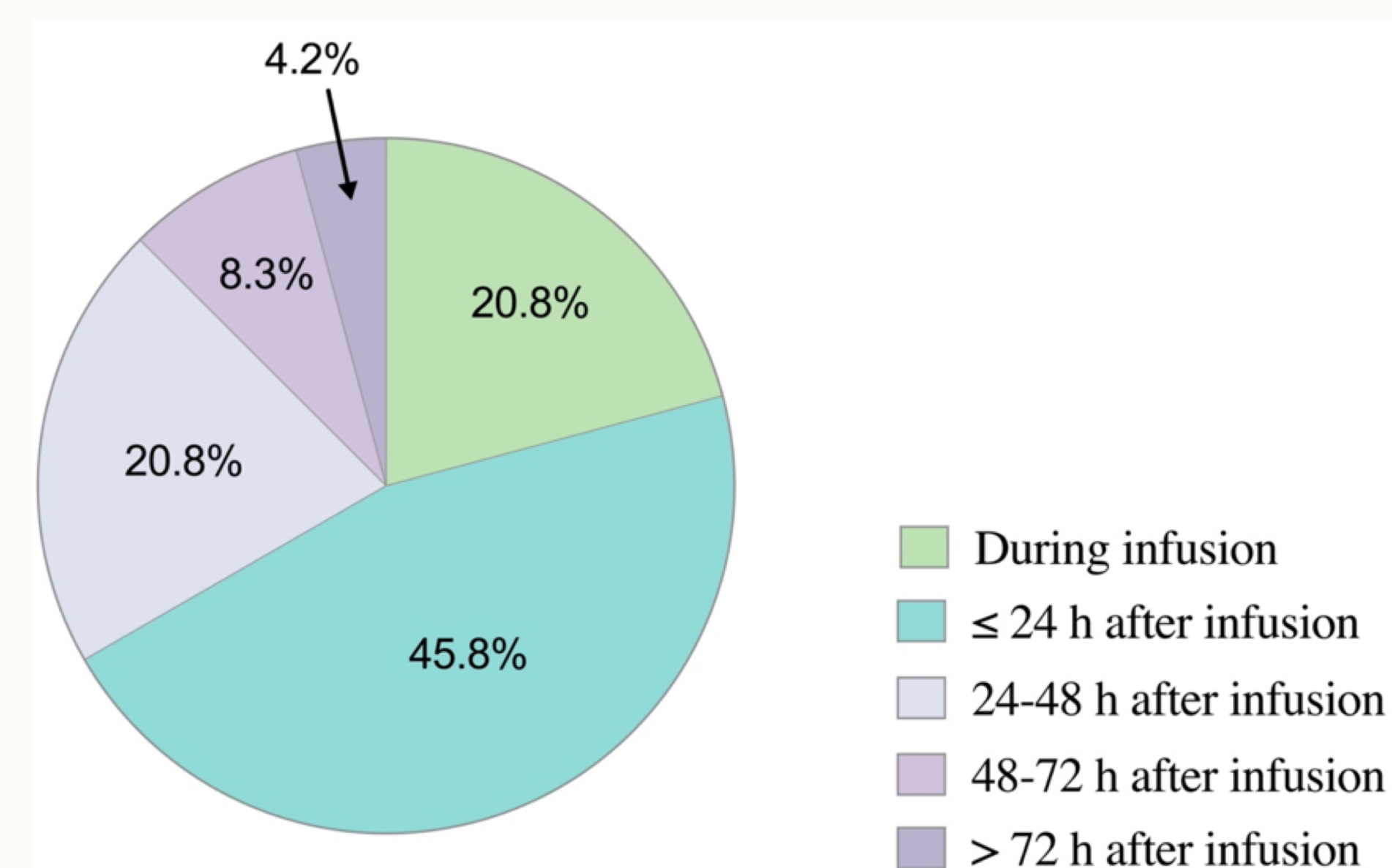


Figure 2. Timing of IRR onset relative to the first lecanemab infusion.

- Hypertension (OR = 5.017, $P = 0.007$) and higher Fazekas score (OR = 2.734, $P = 0.017$) were independently associated with IRR (**Table 1**).

Table 1. Multivariate logistic regression analysis of risk factors for IRR.

Variables	β	S.E.	Wald χ^2	P value	OR (95% CI)
Sex	1.132	0.591	3.671	0.055	3.101 (0.974 ~ 9.870)
Age	-0.051	0.032	2.567	0.109	0.950 (0.892 ~ 1.012)
Hypertension	1.613	0.600	7.221	0.007	5.017 (1.547 ~ 16.268)
Diabetes	0.570	0.709	0.646	0.422	1.769 (0.440 ~ 7.104)
Statins use	1.083	0.571	3.605	0.058	2.955 (0.966 ~ 9.040)
Aspirin use	-1.155	0.948	1.486	0.223	0.315 (0.049 ~ 2.018)
Fazekas score	1.006	0.421	5.712	0.017	2.734 (1.198 ~ 6.239)
APOE $\epsilon 4$ status	0.828	0.553	2.243	0.134	2.288 (0.774 ~ 6.762)

Abbreviations: IRR, infusion-related reaction; OR, odds ratios; APOE, apolipoprotein E.

Conclusions

- This Chinese real-world cohort study showed that lecanemab-associated IRRs were less frequent, mild, and delayed.
- Hypertension and white-matter hyperintensity severity emerged as key risk factors, underscoring the potential role of cerebrovascular health in IRR susceptibility.