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ORIGINAL RESEARCH

Clinical and Economic Benefits of Long-Acting Injectable Paliperidone in Schizophrenia: A UAE-Based Modeling Study

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ABSTRACT

INTRODUCTION: Poor adherence to oral antipsychotic (OAP) therapy is a major driver of relapse in patients with schizophrenia, as only 50% or fewer patients are adherent to OAP during the first year, leading to suboptimal clinical outcomes and substantial healthcare costs. Long-acting injectable (LAI) antipsychotics enhance treatment continuity and sustained drug exposure, with real-world data showing improved effectiveness as dosing intervals lengthen due to better adherence. We evaluate the clinical and economic consequences, in the United Arab Emirates (UAE) healthcare setting, of switching patients with schizophrenia from OAPs to paliperidone LAIs with different dosing intervals, including semi-annual formulations (PP6M).

METHODS: Hazard ratios (HRs) for relapse were derived from an updated systematic review and incorporated into a Bayesian hierarchical model capturing the combined effects of route of administration and dosing frequency. Model outputs were used to populate a cost-consequence model developed from the UAE healthcare third-party payer perspective. Only direct medical costs were considered with hospitalization used as a proxy for relapse. Analyses were conducted over 1- and 5-year time horizons.

RESULTS: Over the 1-year horizon, the total budget per patient decreased by approximately 8%, 26%, and 50% following switches from OAP to paliperidone palmitate 1-month, 3-month, and 6-month formulations respectively. This corresponded to an estimated saving of ~20,000 AED per patient per year with PP6M which was associated with the lowest predicted relapse rates. Although longer-acting LAIs were associated with higher pharmaceutical expenditure per injection, reductions in relapse-related hospitalizations generated budget saving that exceeded incremental drug costs.

CONCLUSIONS: In the UAE context, transitioning patients with schizophrenia from OAPs to paliperidone LAIs, including PP6M, may improve disease control and lead to favorable economic outcomes. Improved adherence translates into clinically meaningful reductions in relapse, with overall cost savings driven by avoided hospitalizations, supporting broader adoption of LAI strategies.

Keywords

Paliperidone palmitate 6-month; Long-acting injectable antipsychotics; Oral antipsychotics; Schizophrenia; Relapse prevention; Cost-consequence analysis; United Arab Emirates healthcare setting

INTRODUCTION

Schizophrenia is a mental health condition that affects cognition, behavior, and psychosocial functioning. It is characterized by psychosis and associated with considerable disability, with potential impact across multiple areas of life including personal, family, social, educational, and occupational domains [1].

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According to the Global Burden of Disease (GBD) study 2023, schizophrenia is among the principal causes of years lived with disability (YLDs) worldwide [2]. Data from the GBD 2019 study further indicate that schizophrenia represents a substantial public health burden in the United Arab Emirates (UAE), with an estimated prevalence of approximately 40,000 individuals and more than 1,700 incident cases reported in 2019 [3]. Consistent with these estimates, the Emirates Health Services reports a current prevalence of approximately 1% within the UAE healthcare system [4].

Antipsychotic medications are recommended as first-line treatment for schizophrenia and include both first-generation (FGAs) and second-generation (SGAs) agents, available as oral antipsychotics (OAPs) and/or long-acting injectable formulations (LAIs). In clinical practice, adherence to OAP therapy may be suboptimal, potentially compromising treatment continuity [5].

Non-adherence to antipsychotic treatment is common, particularly during the early stages of schizophrenia. Approximately half of patients show poor adherence to oral therapy [6,7] and more than 70% discontinue treatment within the first 18 months [8]. Non-adherence represents one of the main factors associated with increased relapse risk [9], leading to significant clinical and public health consequences, including hospitalization and greater healthcare utilization [10]. LAIs may help address some of the limitations associated with oral antipsychotics, for example by removing the need for daily dosing, ensuring more stable drug exposure, and supporting treatment continuity [11,12].

Evidence comparing LAIs and OAPs in relapse prevention has shown heterogeneous results. Meta-analyses based on randomized controlled trials have reported limited or non-significant differences between LAIs and OAPs in relapse reduction [13], whereas analyses based on observational and mirror-image studies, which better reflect real-world clinical practice, have demonstrated a significant reduction in hospitalization rates associated with LAIs use [14]. This discrepancy suggests that the clinical benefit of LAIs may be largely driven by improved adherence under real-world conditions rather than intrinsic differences in pharmacological efficacy [13–15].

A network meta-analysis and subsequent update by Zaniolo et al. [16–18], showed that in the real-world setting, LAIs were more effective than OAPs in reducing relapse risk, with a more pronounced effect for SGAs compared with FGAs. In particular, LAIs were associated with a 20% reduction in relapse risk for FGAs and nearly a 50% reduction for SGAs compared with the same agents administered orally [16]. Importantly, the effectiveness of treatment increased as the inter-administration interval became longer: for each doubling of the dosing interval, relapse risk was reduced by approximately 10% [17]. This gradient effect is plausibly explained by improved adherence, which is known to be a major determinant of relapse in schizophrenia, particularly under real-world conditions. In this context, LAIs with extended dosing intervals may further enhance treatment continuity and reduce the risk of non-adherence. Among these, paliperidone is available in three formulations with progressively longer dosing intervals: 1-month (PP1M), 3-month (PP3M), and 6-month (PP6M), all approved for management of schizophrenia in adults [19–21]. PP6M offers the longest LAI dosing interval available to date and, along with PP1M and PP3M, provides flexible dosing regimens for a patient-centric approach in the management of schizophrenia [22].

To further explore these dynamics, the present study aimed to evaluate the clinical and economic consequences, within the UAE healthcare setting, of switching patients with schizophrenia from OAPs to paliperidone LAIs with different dosing intervals, including the PP6M formulation. The analysis was informed by and based on the results of the network meta-analysis and its subsequent update conducted by Zaniolo et al. [16–18], which quantified the relationship between dosing interval and relapse risk reduction in real-world settings. By applying these evidence-based estimates to the UAE context, the objective was to provide a structured and data-driven framework to support clinical decision-making and healthcare resource allocation.

METHODS

A cost-consequence model was developed in the context of the UAE public-sector hospitals from the perspective of the third-party payer, defined as the Department of Health (DOH) for UAE nationals and health insurance payers for expatriate residents receiving care in public-sector facilities. The model used 1- and 5-year time horizons and costs were expressed in UAE dirhams (AED). Only direct medical costs were considered, including drug acquisition costs and relapse management costs. Inpatient relapse costs were informed by

UAE diagnosis-related group (DRG) tariffs for mental health admissions specific to schizophrenia [23].

Clinical inputs

The model was populated with clinical inputs derived from hazard ratios (HRs) for relapse associated with different antipsychotic regimens obtained from the network meta-analysis and its subsequent update conducted by Zaniolo et al. [16–18]. Briefly, a systematic literature search of MEDLINE/PubMed was conducted to identify studies reporting efficacy or effectiveness outcomes for LAIs and OAPs. Studies comparing treatment strategies differing in active ingredient, route of administration, and/or inter-administration interval were eligible for inclusion. The extracted HRs were pooled using a Bayesian hierarchical model previously developed by Zaniolo et al. [16–18], including the administration route and frequency (Table I). The Bayesian hierarchical model estimation of the relative risk of relapse according to route of administration (OAPs vs LAIs) and dosing frequency, including PP1M, PP3M, and PP6M formulations was included as main clinical input in the present analysis.

Treatment effect	RR (95% CI)	Credibility
FGA LAIs vs. OAPs	0.81 (0.78–0.84)	100%
SGA LAIs vs OAPs	0.69 (0.66–0.71)	100%
Inter-dose interval double-up	0.90 (0.81–0.99)	98.3%

Table I. *Relative risk of relapse of FGAs vs SGAs*
FGA: first-generation antipsychotic; SGA: second-generation antipsychotic; OAPs: oral antipsychotics; LAIs: long-acting injectable antipsychotics

Regimen	HR vs. OAPs	95% CI
OAP	1	1–1
PP1M	0.62	0.55–0.69
PP3M	0.41	0.25–0.63
PP6M	0.24	0.21–0.27

Table II. *Hazard ratios for relapse associated with paliperidone LAI formulations compared with OAPs*
HR: hazard ratio; OAPs: oral antipsychotics; PP1M: paliperidone 1-month formulation; PP3M: paliperidone 3-month formulation; PP6M: paliperidone 6-month formulation

Annual relapse rates were calculated by applying the corresponding HRs to the baseline annual relapse rate assumed for OAPs. In the absence of a publicly available UAE national registry reporting relapse rates specifically for patients with moderate-to-severe schizophrenia, the baseline rate for OAPs was assumed to be 1 relapse per patient-year, based on local clinical expert input. Middle East evidence from Oman was used to contextualize this assumption showing an average time to relapse of 14.28 months in patients with first-episode psychosis, with shorter relapse times among medication-noncompliant versus compliant patients [24].

As the reference category, OAPs were assigned an HR of 1, while the HRs for the paliperidone palmitate formulations were estimated relative to OAPs. The modeled HRs relative to OAPs were those obtained by the Bayesian hierarchical model: 0.62 for PP1M, 0.41 for PP3M, and 0.24 for PP6M as reported in Table II.

To account for the increased relapse risk associated with prior relapse history, an adjustment factor was applied from the second year onward. This assumption was informed by a retrospective observational cohort study in which Rivelli et al. [9] reported a 5% increase in relapse incidence for each additional prior relapse (RR = 1.05 [1.03–1.06], $p < 0.0001$) among patients with schizophrenia or schizoaffective disorder. The resulting relapse risks were applied within the economic model to estimate clinical outcomes and associated costs over the selected time horizons. Accordingly, relapse risks in years 2-5 were adjusted to reflect the cumulative effect of prior relapses, and the resulting annual relapse risks were applied in the model to estimate clinical outcomes and associated costs over the selected time horizons.

Economic input

Considering that the present cost analysis was conducted from the UAE healthcare payer perspective, only direct medical costs were considered. These included drug acquisition costs and costs related to relapse management, with hospitalization used as a proxy for relapse. This definition was supported by both theoretical and practical considerations. A systematic review of relapse definitions in schizophrenia identified hospitalization as a proxy to define relapse in the literature [10]. Moreover, baseline relapse rates were derived from real-world data included in the meta-analyses, in which hospital admission is generally captured as the relevant event, particularly when administrative healthcare databases are used.

In our model, only acute episode management was considered, with a hospitalization unit cost of 32,000 AED per relapse, according to DRG tariffs [25]. Administration costs for LAI injection were included (70 AED per dose) assuming delivery either through community home care or in an outpatient setting [23]. Costs associated with adverse events (AEs) related to OAP treatment were also considered (2,400 AED per year/200 AED per month). The AEs

monthly cost represents a blended estimate, calculated as the weighted average of primary AE incidence and corresponding pharmaceutical management costs, sourced from the DOH price lists across the three oral antipsychotics included in the analysis (olanzapine, quetiapine and aripiprazole) [26].

Drug acquisition costs were estimated using publicly available package prices from the DOH drug price list [26]. To reflect real-world utilization patterns, market share-based weighting was applied within treatment classes. For OAPs, a weighted treatment mix of aripiprazole, quetiapine, and olanzapine was assumed. For paliperidone LAIs, each dosing interval (1-, 3-, and 6-month formulations) was modeled according to the observed distribution of market share across available formulations (Table III).

For cost calculation purposes the adherence rate for OAPs was assumed to be 50%, consistent with average values reported in the literature [6,7]. Although this estimate was not derived from UAE-specific adherence data, it is nevertheless supported by regional evidence from Arab and Gulf Cooperation Council (GCC) countries, where suboptimal adherence and limited persistence with OAPs therapies have been reported as common challenges in patients with schizophrenia [27,28].

Active substances	MS within class	Package	Third-party payer perspective (AED)				
			Unit/ month*	Package price to pharmacy	Unit price to pharmacy	Annual cost	MS within AS
OAP							
Aripiprazole	36%	ABILIFY® 15 mg	60	585.38	19.51	14,244	50%
		ABILIFY® 20 mg	30	774.85	25.82	9,427	50%
						11,836	
Quetiapine	33%	SEROQUEL XR® 300 mg	60	440,2	7.34	5,358	34%
		SEROQUEL XR® 400 mg	30	611,97	10.2	3,723	33%
		SEROQUEL XR® 400 mg	60	611,97	10.2	7,446	33%
						5,508	
Olanzapine	31%	ZYPREXA® 10 mg	30	265.64	8.86	3,234	25%
		ZYPREXA® 7.5 mg	60	1,067.79	19.07	13,921	25%
		ZYPREXA VELOTAB® 10 mg	60	700.78	25.03	18,272	50%
						13,425	
LAI PP1M ^							
Paliperidone	100%	INVEGA SUSTENNA® 100 mg/ml	1	1,513.77	1,513.77	18,417	40%
		INVEGA SUSTENNA® 150 mg/1.5ml	1	1,761.17	1,761.17	21,427	50%
		INVEGA SUSTENNA® 50 mg/0.5ml	1	935.99	935.99	11,387	0%
		INVEGA SUSTENNA® 75 mg/0.75ml	1	1,235.09	1,235.09	15,026	10%
						19,583	
LAI PP3M							
Paliperidone	100%	TREVICTA® 175 (200mg/ml)	0.3	2,377.53	2,377.53	9,642	0%
		TREVICTA® 263 (200mg/ml)	0.3	3,152.41	3,152.41	12,785	10%
		TREVICTA® 350 (200mg/ml)	0.3	4,018.38	4,018.38	16,297	40%
		TREVICTA® 525 (200mg/ml)	0.3	5,855.4	5,855.4	23,746.9	50%
						19,671	
LAI PP6M							
Paliperidone	100%	BYANNLI® 700 mg/1 Syringe	0.2	6,462.34	6,462.34	13,104	50%
		BYANNLI® 1000 mg/1 Syringe	0.2	7,946.62	7,946.62	16,114	50%
						14,609	

Table III. *Cost inputs: drug acquisition used in the analysis*

* 30 days

^ Paliperidone PP1M is marketed as Invega Sustenna® or Xeplion® depending on the country of commercialization

AS: active substance; LAI: long-acting injectable formulation; MS: market share; OAP: oral antipsychotic; PP1M: paliperidone 1-month formulation; PP3M: paliperidone 3-month formulation; PP6M: paliperidone 6-month formulation

Based on odds ratios reported by Pilon et al., the adherence rate for paliperidone LAIs was estimated at 82% [29]. Although UAE-specific adherence estimates for paliperidone LAIs were not identified, this assumption is consistent with regional clinical consensus, which supports broader and earlier use of LAIs in schizophrenia as a strategy to address adherence challenges and improve long-term maintenance outcomes [30].

Sensitivity analyses

A one-way deterministic sensitivity analysis (DSA) was conducted to assess the impact of parameter uncertainty on the results of the analysis. The analysis was performed on the 1-year time horizon only and focused exclusively on the comparison between PP6M and OAPs. Key model parameters were varied individually by ±20% from their base-case values, while holding all other inputs constant.

RESULTS

The 1-year prospective economic evaluation from the third-party payer perspective showed that paliperidone LAIs were associated with cost savings compared with OAPs, with progressively greater savings observed as the injection interval increased.

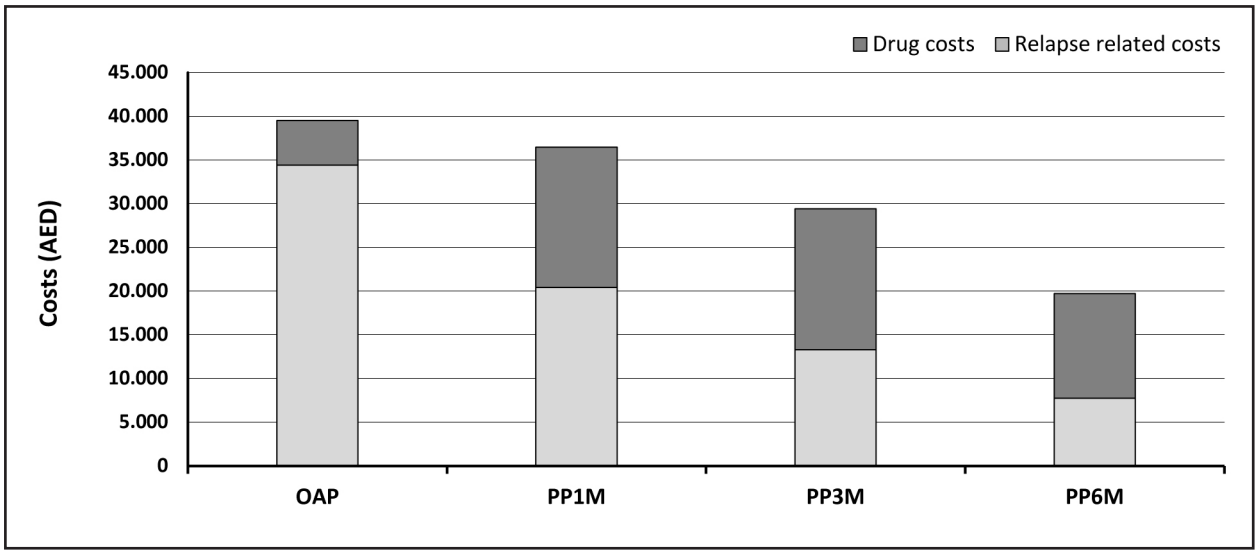

Figure 1. *Mean cumulative total cost over a 1-year time horizon from the third-party payer perspective*
OAP: oral antipsychotics; PP1M: paliperidone 1-month formulation; PP3M: paliperidone 3-month formulation; PP6M: paliperidone 6-month formulation

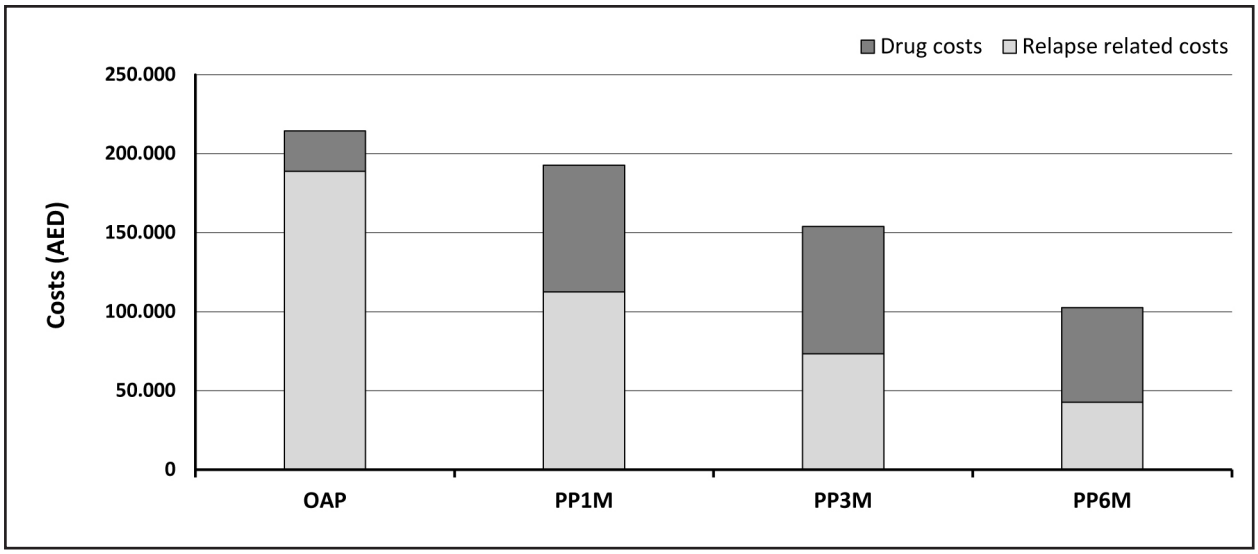

Figure 2. *Mean cumulative total cost over a 5-year time horizon from the third-party payer perspective*
OAP: oral antipsychotics; PP1M: paliperidone 1-month formulation; PP3M: paliperidone 3-month formulation; PP6M: paliperidone 6-month formulation

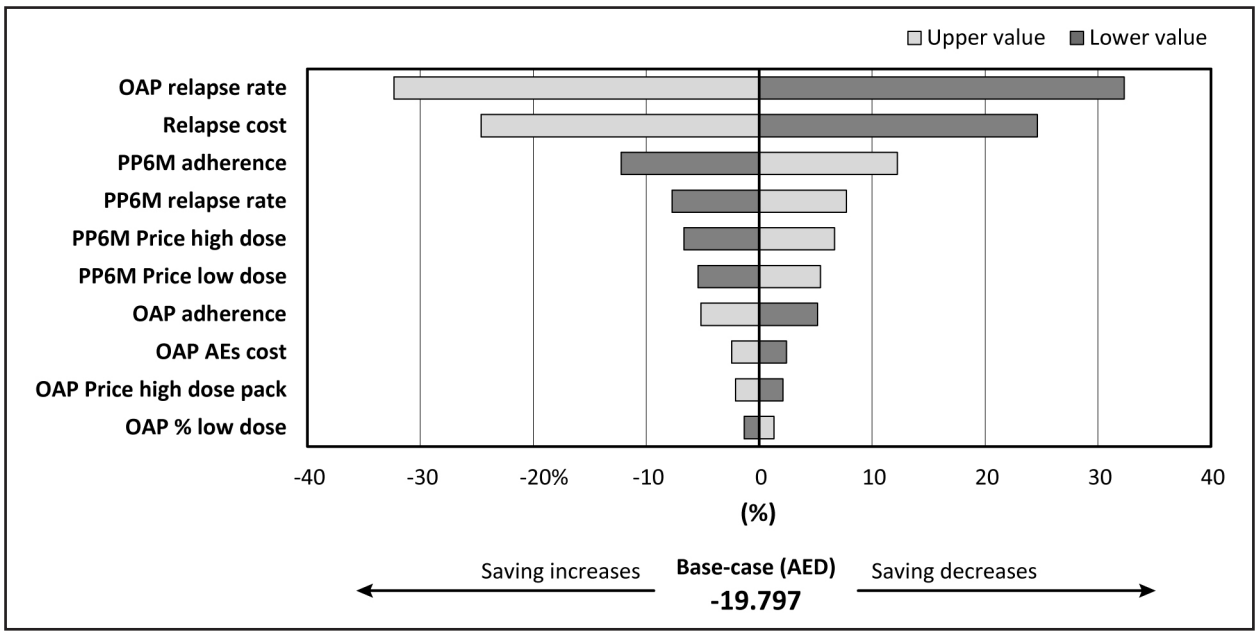

Figure 3. *Tornado diagrams: one-way sensitivity analyses (third-party payer perspective)*
AEs: adverse events; OAP: oral antipsychotics; PP6M: paliperidone 6-month formulation

Compared with the OAP reference scenario, PP1M generated annual savings of 3,046 AED, corresponding to an 8% reduction in total costs. PP3M was associated with greater savings (10,102 AED; −26%), while the largest economic benefit was observed with PP6M, which resulted in estimated annual savings of 19,797 AED and a 50% reduction in total costs.

Drug acquisition costs were higher for LAIs, particularly for PP1M and PP3M (approximately 16,000 AED) and for PP6M (11,979 AED) compared with OAPs (5,120 AED), while total non-pharmaceutical costs, including LAI administration, oral AEs management, and hospitalization, were substantially higher with OAPs (34,400 AED) than with PP6M (7,744 AED), resulting in a net saving of 26,656 AED in favor of PP6M (Figure 1).

Comparable trends were observed over the 5-year time horizon from the third-party payer perspective (Figure 2). Using OAPs as the reference scenario, PP1M was associated with total savings of 21,684 AED (−10%), while PP3M generated greater savings (60,476 AED; −28%). The largest economic advantage was observed with PP6M, resulting in a total cost difference of 111,794 AED and a 52% relative difference in total costs.

Over 5 years, pharmaceutical expenditure was higher with all LAIs compared with OAPs (25,600 AED), amounting to approximately 80,000 AED for PP1M and PP3M and 59,897 AED for PP6M.

However, total non-pharmaceutical costs were substantially higher with OAPs (188,820 AED) compared with PP6M (42,729 AED), yielding a net saving of 146,091 AED in favor of PP6M.

Sensitivity analysis

The results of the DSA are presented in a tornado diagram, illustrating the key parameters influencing total cost savings for the UAE healthcare system from third-party payer perspective. Analyses were conducted over a 1-year time horizon focusing on the comparison between PP6M and OAPs. From both perspectives, the DSA identified the OAP relapse rate and the cost of relapse management as the primary cost drivers (Figure 3).

DISCUSSION

This cost-consequence model suggests that shifting from OAPs to paliperidone LAIs with longer inter-administration intervals may lead to substantial economic savings, providing new evidence within the UAE healthcare setting. From the third-party payer- perspective, over a 1-year horizon, PP6M was associated with estimated savings of 19,797 AED per patient, corresponding to a 50% reduction in total costs compared with OAPs. PP3M and PP1M also generated savings (10,102 AED and 3,046 AED, respectively), demonstrating a progressive economic advantage associated with increasing dosing intervals within the model framework. These findings provide context-specific evidence regarding the twice-yearly PP6M formu-

lation in the UAE setting and are in line with UAE-based published results from Nuhoho et al., who showed that PP1M, compared with oral antipsychotics, was associated not only with improved clinical outcomes but also with cost savings for the UAE healthcare system [31].

Beyond UAE-specific evidence, a recent international real-world study from another healthcare setting provides additional supportive evidence for longer-interval formulations. In a retrospective cohort study conducted in Japan, Chiang et al. compared PP3M with PP1M and found that the PP3M cohort had a lower risk of relapse (HR: 0.605; 95% CI: 0.427-0.856), longer treatment persistence, and higher treatment adherence than the PP1M cohort [32]. These findings are consistent with the advantages associated with longer dosing intervals assumed in our model, in which progressively lower hazard ratios for relapse were applied for PP1M, PP3M, and PP6M relative to OAPs.

The DSA showed that the 1-year base-case saving (−19,797 AED), from the third-party payer perspective, was most sensitive to variations in the OAP relapse rate and relapse-related hospitalization costs, identifying these parameters as the principal cost drivers. This finding indicates that relapse prevention was an important contributor to the economic outcome estimated in the model.

Over the 5-year horizon, this pattern was sustained and amplified: PP6M resulted in cumulative savings of 111,794 AED (−52%), despite higher drug acquisition costs (PP6M: 59,897 AED vs OAPs: 25,600 AED), primarily due to markedly lower non-pharmaceutical costs (PP6M: 42,729 AED vs OAPs: 188,820 AED). Overall, within the UAE context, the modelled results suggest that the economic benefits of longer-acting LAIs and confirm that relapse-related costs represent a key economic factor in the model.

Evidence from other healthcare systems was used to contextualize the direction of the modelled results. For example, studies conducted in Japan, Spain, the United States, Italy, and other international settings have reported improved adherence, persistence, relapse-related outcomes, or economic offsets with paliperidone LAIs compared with oral or shorter-interval antipsychotic regimens. In Spain, in the PAPSEM study, García-Jiménez et al. reported improved clinical stability and reduced hospitalization rates in patients who switched from PP1M or PP3M to PP6M. The study also highlighted favorable safety and treatment acceptance outcomes, with few severe AEs observed and more than 94% of patients expressing a positive attitude toward switching to the six-month regimen [33].

Similarly, in the international 2-year open-label extension study by Najarian et al. (2023), PP6M demonstrated sustained long-term efficacy, a low relapse rate (3.9%) and a favorable safety profile [15].

These findings support the favorable tolerability profile of PP6M and are in line with other observational and real-world studies showing good tolerability and improved clinical outcomes with extended-interval regimens compared with shorter-interval or oral therapies [34–36].

Our findings are consistent with previously published economic evidence across different national healthcare contexts, including a U.S. Medicaid analysis showing that the higher acquisition costs of paliperidone LAIs were offset by reductions in relapse-related healthcare expenditures over a 3-year horizon [37], as well as studies from other healthcare systems where lower hospitalization rates associated with paliperidone LAIs translated into overall budget savings despite increased drug costs [38,39], a pattern also observed for PP6M in the Italian setting [17].

In the interpretation of the results, it should be considered that these modelled estimates are scenario-based and reflect the potential economic impact of the twice-yearly administration of PP6M from the UAE healthcare perspective, using UAE-specific cost inputs combined with clinical assumptions derived from international evidence, rather than direct UAE real-world evidence.

This analysis is subject to some limitations. First, adherence rates used to estimate drug costs were based on assumptions derived from the literature rather than directly UAE-observed data. In particular, adherence to OAPs was assumed to be 50%, which may not fully reflect real-world variability, as prescription-based estimates do not necessarily capture actual medication use. Similarly, adherence to paliperidone LAIs was derived from data on PP1M from Pilon et al. [29] and may not be generalizable to longer-interval formulations.

Second, relapse-related hospitalizations were used as the main proxy for the economic consequences of relapse. As a result, the estimated savings mainly reflect avoided hospitalization costs and may not capture the full burden of relapse, including relapses managed in outpatient settings, caregiver burden, productivity losses, or broader patient-level consequences.

Third, the model assumes a shift from OAPs to paliperidone LAIs according to the treatment scenarios evaluated. However, in clinical practice, LAI switching depends on patient

eligibility, clinical stability, prior treatment response, patient acceptance, and the availability of follow-up and administration services. Therefore, the modelled savings should be interpreted as applying primarily to patients who are clinically suitable for LAI treatment.

For UAE payers and healthcare decision-makers, these model findings may provide useful information on the potential economic implications of relapse prevention with PP6M administration, including the extent to which avoided relapse-related costs may offset higher drug acquisition costs. Further UAE-specific real-world data on adherence, relapse, hospitalization, treatment discontinuation, and treatment patterns would be useful to validate these assumptions in routine clinical practice.

Taken together, the available evidence is consistent with the model findings and supports the potential value of longer-interval antipsychotic formulations in improving clinical stability while generating economic benefits. Beyond direct healthcare savings, reducing relapse burden may also generate broader societal benefits for patients, families, caregivers, and healthcare providers.

CONCLUSION

In conclusion, this cost-consequence analysis suggests that, although extended-interval LAIs are associated with higher pharmaceutical acquisition costs, modelled reductions in relapse-related hospitalizations may generate sufficient cost offsets to result in net savings. This effect was particularly evident for PP6M, which showed the largest estimated economic benefit. These findings should be interpreted in light of the assumptions on adherence, the use of hospitalization as a proxy for relapse-related economic consequences, and the clinical suitability of patients for switching from OAPs to LAI treatment. Overall, extended dosing interval therapies may represent a clinically sound and economically sustainable strategy for optimizing schizophrenia management in selected patients within the UAE healthcare system.

Conflict of interest

M.Z., N.N.A., and N.G. have no competing interests. M.H., A.N., and A.R.E. are employees of J&J. W.A.N. has received honoraria from J&J for participation in advisory boards and support from J&J for attending meetings. L.P. is co-owner and employee of AdRes, which has received project funding by J&J for the conduction of the study.

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Author contributions

All authors contributed to the study conception and design. L.P. performed material preparation, data collection, and analysis. All authors contributed to manuscript drafting or critical revision and approved the final version of the manuscript.

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List of abbreviations

AED: United Arab Emirates dirham
AE: adverse event
AS: active substance
CI: confidence interval
DOH: Department of Health
DRG: diagnosis-related group
DSA: deterministic sensitivity analysis
FGA: first-generation antipsychotic
GBD: Global Burden of Disease
HR: hazard ratio
LAI: long-acting injectable
MS: market share
OAP: oral antipsychotic
PP1M: paliperidone palmitate 1-month formulation
PP3M: paliperidone palmitate 3-month formulation
PP6M: paliperidone palmitate 6-month formulation
RR: relative risk
SGA: second-generation antipsychotic
UAE: United Arab Emirates
YLDs: years lived with disability

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