Proasis

DesertSci

Accelerated discovery, impactful results

Turn high volume, high value protein structure data into targeted research insights

The unprecedented growth in protein structure data, driven by AI predictions, has transformed the landscape of drug discovery, demanding new tools for efficient analysis and collaboration.

Reducing time, cost and risk in drug discovery

Developing a new drug is a complex, costly endeavour. On average, it takes 10-15 years and $1-2 billion to move a single candidate from discovery to approval, with most candidates (about 90%) failing before approval.

This intensive process, which depends on skilled experts and vast resources, slows innovation and delays breakthroughs.
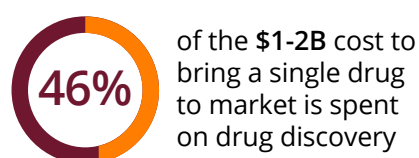
Reduce time, cost, and risk in early-stage candidate selection, and transform your organisation's potential.

Lower costs, accelerated timelines with Proasis4

Proasis centralises and streamlines protein structure data analysis, enabling research teams to identify and refine drug candidates with unmatched speed and precision.

Proasis's advanced features improve the quality of early-stage candidates, reducing reliance on costly real-world testing and allowing teams to focus on high-potential leads from the start.

With Proasis, your team can achieve substantial cost savings, accelerate timelines, and increase the likelihood of successful candidate development.

46% of the **$1-2B** cost to bring a single drug to market is spent on drug discovery

20% reduction in this cost represents a saving of **$200 to $400M**

Protein structure data: New challenges & opportunities

Protein structure data is critical for rational drug design because by understanding the shape and active sites of proteins, researchers can develop targeted therapies that bind effectively and positively impact the protein function.

With the advent of AI models like DeepMind's AlphaFold, the pool of predicted protein structures has surged from around 200,000 to over 200 million, adding a new layer of complexity to discovery, data management and collaboration.

To fully leverage this wealth of high value data for breakthroughs in drug discovery, research teams now require a centralised, standardised platform that streamlines analysis, sharing, and collaboration. Proasis by DesertSci is that platform, purpose-built to support drug discovery teams in making the most of this unprecedented data landscape.

Core capabilities of Proasis

Proasis is the centralised, standardised protein structure database at the heart of DesertSci's suite of drug discovery solutions.

Enhanced by DesertSci's full suite including **ViewContacts, Scorpion, Viper**, and **FELIX**, Proasis streamlines the process of structure-based drug design (SBDD), accelerates candidate identification, and maximises data-driven insights.

How Proasis's capabilities drive efficiency, collaboration, and impactful results:

STANDARDISED DATA FORMATS

Supports common formats (e.g., PDB, mmCIF), enabling compatibility and up to$200-$400 million in cost savings by simplifying data management.

ADVANCED SEARCH & RETRIEVAL

Proasis's precise filtering options enhance search efficiency, improving drug discovery speed by 300% and helping researchers focus on viable candidates sooner.

REAL-TIME COLLABORATION

Integrated annotation and sharing tools support global teamwork, driving $100 million in productivity gains.

API ACCESS

Seamlessly connects with existing platforms, helping reduce failure rates by 25% through enhanced data accessibility.

3D VISUALISATION TOOLS

Built-in features enable direct interaction with protein structures, speeding up candidate identification.

MODELLING TOOLS

Proprietary molecular modelling enhances validation and helps capture opportunities in the $26 billion drug repurposing market.

Proasis: Faster discoveries, faster time-to-value

Proasis provides exceptional value compared to other less comprehensive solutions, granting unlimited user access. It delivers substantial savings and accelerated timelines, making it a high-impact, cost-effective solution for modern drug discovery.

Proasis: Maximising research efficiency and impact

Here's how Proasis empowers research teams to achieve more with less, maximising efficiency and impact across drug discovery projects:

- **Accelerated research:** Proasis streamlines access to high-value protein structure data, allowing researchers to bypass time-consuming data management and focus directly on innovation. By reducing the time and team size needed for each project, Proasis translates to significant cost savings. With Proasis, time really is money, unlocking faster discoveries with leaner teams.

- **Enhanced discoveries:** Improved data sharing leads to collaborative projects, fostering interdisciplinary research and novel discoveries.

- **Informed decision-making:** Access to high quality, carefully curated and standardised data helps researchers make better-informed hypotheses and conclusions.

- **Designed for medchem:** With over 25 years of development, specifically for medicinal chemistry, Proasis transforms raw protein structure data into actionable insights, identifying trends that drive drug discovery.

- **Robust security features:** Protects sensitive information with advanced security protocols, ensuring highly sensitive data is safe from breaches and unauthorised access.

- **User-friendly interface:** No more complex setups or steep learning curves. Our intuitive design allows users of all levels to navigate and manage protein structure data effortlessly.

- **Scalability:** Whether a startup or an enterprise, our software grows with you. Easily scale your database to handle increasing data volumes without compromising performance.

- **Customisable integration:** Proasis integrates seamlessly into existing workflows, with options to fit the unique processes of large organisations, driving productivity without disrupting established systems.

Proasis: A transformational tool for modern drug discovery

With decades of experience and an established presence in the world's leading pharmaceutical and biotech companies, DesertSci has crafted Proasis to meet the highest standards in drug discovery.

Investing in Proasis means empowering your research with a powerful tool that bridges gaps, supports collaboration, and leverages the full potential of structural biology.

Proasis

A low cost competitive edge

Despite its powerful capabilities and measurable impact, Proasis is offered at an accessible price point, delivering exceptional value and a clear competitive edge in cost-effectiveness.

Get in touch to discuss how Proasis4 could benefit your organisation, and to arrange a demonstration and free trial.

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