Strand Scientific Journal

Issue 1, September 2026

STRAND
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Foreword

From expertise to evidence: A new publication series from Strand consultancy experts

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In an industry where decisions have direct implications for patient safety, regulatory approval, and long-term commercial viability, scientific credibility constitutes a fundamental pillar. This is particularly evident in the pharmaceutical sector, where peer-reviewed publications represent one of the most robust mechanisms for validating evidence, disseminating innovation, and fostering trust among regulators, industry partners, and patients alike. A dynamic synergy is thereby established between industry and academia: practical challenges emerging from industrial practice are addressed through academic inquiry, while novel scientific frontiers are defined through collaborative engagement.

Moreover, research into contemporary health challenges frequently lays the foundation for new therapeutic approaches that are subsequently developed and industrialized by pharmaceutical companies. This process creates a continuous and evolving flow of knowledge. Drug development is inherently cumulative. Each new therapeutic entity builds upon decades of experimental data, methodological refinement, and regulatory learning. In parallel, frameworks such as Quality by Design (QbD) are increasingly implemented across multiple levels of pharmaceutical development, offering structured approaches to address the growing complexity of lifecycle management while bridging the gap between theoretical principles, regulatory expectations, and operational realities.

Peer-reviewed literature serves as the primary vehicle through which this body of knowledge is structured, validated, and disseminated. It provides a reliable and standardized foundation that enables cumulative scientific progress by ensuring that data and findings are rigorously scrutinized, contextualized, and preserved. This, in turn, allows subsequent researchers and practitioners to reproduce, challenge, and extend previous work, constituting an essential safeguard in a highly regulated environment.

As expert consultants within the Life Sciences sector, maintaining continuous awareness of emerging challenges and innovations is imperative. Engagement with the most recent scientific literature positions consultants at the intersection of academic research, industrial implementation, and regulatory compliance, enabling the identification and development of optimal solutions for partners. Modern pharmaceutical development increasingly prioritizes evidence-based decision-making, particularly in domains such as risk management, analytical method robustness, and lifecycle optimization. Scientific publications provide the validated evidence necessary to support strategic decision-making, including the justification of methodological flexibility, post-approval change strategies, and the adoption of innovative approaches.

Although solutions are often tailored to the specific context of each partner, they must remain grounded in rigorously substantiated evidence. Any proposed approach must withstand critical scrutiny prior to implementation, underscoring the importance of transparency and scientific validation. Consequently, the dissemination and exchange of knowledge are essential for advancing both scientific research and industrial innovation in the pharmaceutical field.

In a domain where the development of safe and effective medicines relies on cumulative evidence, collaboration among academia, regulatory authorities, and industry stakeholders plays a critical role in accelerating discovery and improving outcomes. The systematic exchange of information on methodologies and clinical findings reduces duplication of effort, optimizes resource utilization, and shortens development timelines. Furthermore, it enhances scientific rigor through independent validation and peer review, while facilitating access to diverse expertise that may not be available within a single organization. This is an essential factor when addressing increasingly complex challenges.

Additionally, knowledge sharing contributes to the harmonization of standards and best practices across regulatory jurisdictions, which is particularly important in a globalized and highly regulated environment. Ultimately, a culture of openness and collaboration transforms isolated efforts into collective progress, ensuring that scientific advancements are translated more efficiently into accessible healthcare solutions for society.

At Strand, we believe that the dissemination of scientific knowledge is a critical driver of collective progress. By sharing expertise while safeguarding the confidentiality of partners, it becomes possible to explore new pathways grounded in established science. Anchoring customized solutions in widely accepted scientific principles reduces uncertainty and enhances the robustness and defensibility of decision-making processes. Furthermore, maintaining proximity to the forefront of scientific advancement not only enables the resolution of current challenges but also supports the anticipation of future developments, allowing them to be addressed proactively through evidence-based strategies.

Through this new series of peer-reviewed publications, authored by expert consultants on emerging challenges and innovations in the life sciences, we aim to remain closely aligned with the latest scientific developments while contributing meaningfully to the advancement of the field. In doing so, we uphold the principles of rigor, transparency, and continuous improvement that underpin successful pharmaceutical innovation.

On behalf of Strand, we hope you enjoy exploring this selection of articles crafted by our consultants. We trust they will spark ideas and inspire your future research. We always welcome the opportunity to connect and collaborate, working together to elevate your business.

J. Aspromonte is an expert consultant at Strand with over 10 years of experience in analytical chemistry. He obtained his MSc in Analytical Chemistry from UNLP in 2014 and his PhD in Pharmaceutical Sciences from KU Leuven in 2021 and has since contributed to several leading pharmaceutical companies. Known for his ability to bring fresh perspectives to complex challenges, he consistently delivers innovative, scientifically robust solutions to operational issues. He has also authored and peer-reviewed numerous publications in high-impact scientific journals.

M. Saintmard has more than 15 years of experience in the life sciences sector, supporting organizations across the entire product's lifecycle. He currently leads Strand's rapidly expanding team of dynamic consultants, providing hands-on expertise in areas including Quality Management, Compliance & Validation, Regulatory Affairs, Pharmacovigilance and Drug Safety, R&D, Supply Chain Management, Manufacturing, and Project Management.

In this issue:

Flow Ready: How Pharma is moving biocatalysis toward continuous processing

H. Meersseman Arango

Introduction

Biocatalysis has become a core tool in pharmaceutical route design, driven by enzymes' unmatched enantioselectivity and sustainability credentials. The pharmaceutical industry generates an estimated 10 billion kg of waste per year from active pharmaceutical ingredient (API) production, with E-factors (Environmental Factors, defined as kg waste per kg product) routinely exceeding 25, largely due to multi-step syntheses requiring stoichiometric chiral auxiliaries and heavy-metal catalysts [1]. Key enzyme classes driving these transformations include amine transaminases (ATAs), reductive aminases (RedAms), and lipases, each enabling highly selective chiral synthesis, yielding high-value enantiopure API building blocks under mild aqueous conditions. Importantly, their ability to perform such reactions without protecting-group chemistry or toxic metal residues often translates into reduced waste and simplified downstream processing [1,2].

Two recent authoritative surveys confirm the maturity of industrial uptake: the Swiss Industrial Biocatalysis Consortium (SIBC) 20th-anniversary perspective [3], covering impactful industrial pharmaceutical syntheses, and a 2025 Angewandte Chemie update cataloguing the most recent large-scale enzymatic processes [2]. Both surveys document growing recognition that coupling biocatalysis with continuous manufacturing is increasingly feasible. This momentum is reinforced by the regulatory landscape: the ICH Q13 guideline, adopted in November 2022 by all major regulatory agencies (FDA, EMA, PMDA), provides a harmonised framework for the development, implementation, and lifecycle management of continuous manufacturing processes, significantly reducing the regulatory uncertainty that previously limited industry adoption [4].

Compared to batch, continuous-flow reactors offer tighter parameter control, superior mass and heat transfer, and more predictable scale-up.

The logical endpoint of this convergence is flow biocatalysis: immobilising enzymes on a solid carrier, generally configured as packed-bed reactors (PBRs) able to run continuous operations (Figure 1), enables biocatalyst recycling, eliminates recovery steps, and unlocks significantly higher space-time yields (STY). This review aims to examine recent industrial case studies to assess where the transition from batch to continuous-flow processing stands today.

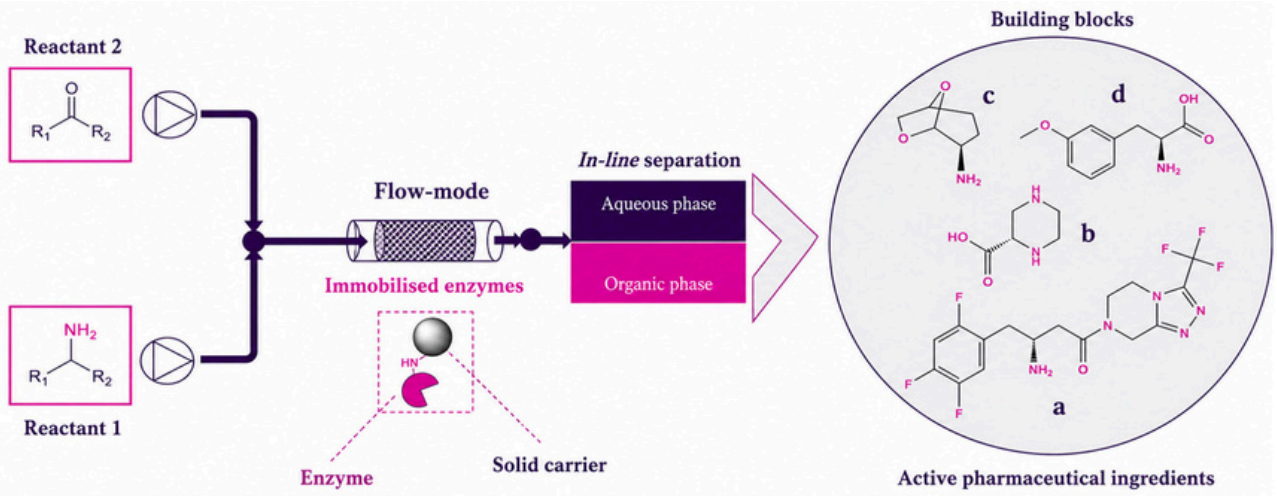

Figure 1. General schematic of a biocatalytic continuous-flow process featuring immobilised enzymes on solid carriers in a packed-bed reactor (PBR). Reactant 1 (e.g. ketone, amino acceptor) and reactant 2 (e.g. amine donor) are pumped through the PBR where the enzymatic reaction occurs, followed by in-line separation of the product stream. Representative pharmaceutical examples produced via this approach are shown: (a) sitagliptin, (b) (S)-piperazine-2-carboxylic, precursor to linvencorvir, (c) cyrene amine, intermediate for nemtabrutinib, and (d) L-phenylalanine analogue.

Discussion

Commercial-Scale Enzymatic Processes in Batch Mode

Before assessing the transition to flow processing, it is instructive to recall how far enzymatic API synthesis has advanced in conventional batch mode. The biocatalytic synthesis of sitagliptin (Figure 1,a) is a landmark example: Merck–Codexis replaced a rhodium-catalysed asymmetric hydrogenation with an engineered ATA-117 transaminase, delivering the antidiabetic API at multi-ton scale with >99.95 % enantiomeric excess (ee) [5], thus demonstrating that free enzymes in stirred-tank reactors can meet the most demanding pharmaceutical manufacturing targets. A decade later, Pfizer extended this precedent to reductive aminases: after three rounds of directed evolution yielding the variant SpRedAm-R3-V6, Pfizer produced multiple metric tons of the cis-cyclobutyl N-methylamine intermediate for the JAK1 inhibitor abrocitinib, with high space-time yield and selectivity [6]. Both processes use free enzymes in batch mode: the chemistry is commercially validated, however neither has yet exploited the productivity gains that immobilization and continuous flow could deliver.

Roche: The Industrial Benchmark in Continuous Flow

The clearest current demonstration of continuous-flow enzymatic processing in pharmaceutical manufacturing comes from Roche, in collaboration with the University of Bern. In the synthesis of (S)-piperazine-2-carboxylic acid (Figure 1,b), a key precursor for Linvencorvir, a protein allosteric modulator, Roche combined Pd/C catalysed hydrogenation with a kinetic resolution using a leucine aminopeptidase 2 (LAP2) [3,7]. Immobilisation of semi-purified LAP2 on a solid support enabled benchmarking across three configurations: conventional batch, SpinChem® rotating bed, and continuous PBRs. The results, summarised in Table 1, are compelling: a 20 mL PBR raised the ideal space-time yield from 2.9 to 50.4 $g \cdot L^{-1} \cdot h^{-1}$ and cut the E-factor from 14.5 to 3.6, reducing waste fourfold, while the immobilised catalyst retained full activity over multiple cycles [7].

Table 1. *Productivity and sustainability metrics for different LAP2 process configurations (adapted from [3,7]).*

Catalyst form	Process type	Specific productivity ($g \cdot g^{-1} \cdot h^{-1}$)	Ideal STY ($g \cdot L^{-1} \cdot h^{-1}$)	E-factor
LAP2 (free)	Batch	0.48	2.9	14.5
Immobilised LAP2	SpinChem®	2.78	16.7	4
Immobilised LAP2	Flow (20 mL PBR)	3.67	50.4	3.6

STY: space-time yield; E-factor: kg waste·kg product^{-1}; PBR: packed-bed reactor.

Merck: From Batch to Flow at Kilogram Scale

A second fully documented batch-to-flow translation comes from Merck & Co. An evolved transaminase (ATA-492), immobilised on an alkylamine-functionalised methacrylate resin (ECR8415), was used to transaminate the biobased solvent Cyrene™ in water-saturated 2-methyltetrahydrofuran (2-MeTHF), yielding cyrene amine (Figure 1,c) (a key intermediate for the inhibitor Nemtabrutinib) with a diastereomeric ratio (dr) > 50:1 [8]. Merck then translated this into a PBR, surveying kinetics under flow conditions before scaling to over one kilogram of product, with the enzyme retaining full activity for >100 h on-stream. Further scale-up to 26 kg of cyrene in the flow system improved diastereoselectivity to dr 200:1 [9].

These cases illustrate how industrial biocatalysis is evolving toward an integrated model that combines enzyme engineering, immobilisation, and continuous processing to enable scalable intensification.

Industry-Wide Enzymatic Processes at the Flow Threshold

Beyond these two implemented examples, a broader cohort of industrial processes has reached the enzyme configurations, substrate loadings, and catalyst stabilities compatible with packed-bed flow operation.

The Novartis–University of Bern collaboration has already taken the flow step: phenylalanine analogues (Figure 1,d) are produced via an immobilised phenylalanine ammonia lyase (PAL) in a continuous PBR, achieving a threefold improvement in space-time yield over batch [10]. Johnson & Johnson also integrated an immobilised lipase in a batch chemo-enzymatic process combining a chiral Suzuki–Miyaura coupling with enzymatic acylation, yielding an MCL-1 inhibitor in high enantiopurity, without chiral chromatography [3,11]. Such robust, immobilised biocatalyst format is inherently compatible with subsequent implementation in continuous flow operation. The SIBC survey further documents processes at Lonza and Givaudan that combine high substrate loadings with in-situ product separation, collectively fulfilling key characteristics of flow-ready biocatalysis [3].

The pharmaceutical industry now explicitly recognises this readiness: a 2020 pharma-industry perspective from Novartis and Roche scientists noted that enzyme immobilisation and flow chemistry were becoming standard design considerations in process development [12], a view echoed by the ACS GCI Pharmaceutical Roundtable, which identified continuous processing as a key lever for sustainability in API manufacturing [13].

While the case studies presented here demonstrate the industrial maturity of continuous flow biocatalysis, several practical challenges remain. The cost and commercial availability of appropriate immobilisation supports can be significant, particularly for novel enzyme–resin pairs that require functionalisation. Mass transfer limitations within densely packed beds can reduce effective enzyme utilisation and must be managed through careful reactor design and flow optimisation. Finally, the continuous-mode operation introduces additional complexity in process validation and regulatory filing compared to established batch protocols, although the ICH Q13 guideline now provides a harmonised framework to address these concerns [4]. Mitigation strategies increasingly employed in industry include the use of commercially available functionalised resins (e.g. Purolite ECR series), the adoption of dynamic flow platforms to survey residence times and kinetic parameters prior to scale-up [9], and the application of process analytical technology (PAT) for real-time in-line monitoring.

Conclusion

Continuous flow biocatalysis is transitioning from academic demonstration to industrial practice. Roche's LAP2-PBR [3,7] and Merck's ATA-492 PBR [8,9] are the two fully documented pharmaceutical examples where this transition has been executed and quantified, yielding significant gains in space-time yield and impressive reductions in waste generation. These flow benchmarks pave the way for the transition of biocatalytic API manufacturing from batch to continuous flow. They are complemented by a growing number of industrial examples featuring immobilised enzymes, well suited to flow processing [3].

The technical toolkit, including reactor design, enzyme immobilisation, and in-line analytics, seems now sufficiently mature for broad implementation. With regulatory frameworks explicitly supporting continuous manufacturing [4, 12, 13] and sustainability pressures intensifying, the question is no longer whether pharma will make the transition to flow biocatalysis, but at what scale and how fast.

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H. Meersseman Arango holds a PhD in Industrial Biochemical Engineering from the Université catholique de Louvain (UCLouvain, Belgium). His doctoral research focused on continuous-flow transaminase reactions for the intensified production of chiral amines relevant to API synthesis, encompassing enzyme immobilisation, reactor engineering, and process intensification. He currently works as a project consultant at Strand Consulting.

Full/empty capsid ratio in AAV products: a critical quality attribute under regulatory scrutiny

C. Lemaigre

Introduction

Gene therapy has emerged as a major area of interest within the scientific and medical communities, with viral vectors playing a central role in therapeutic development. Among these, Adeno-Associated Viruses (AAVs) are currently one of the most widely used platforms. To date, around 10 AAV-based therapies have been granted marketing authorization, and more than 230 are under clinical investigation [1,2].

Recombinant adeno-associated virus (rAAV) is a viral vector engineered from the non-pathogenic adeno-associated virus to deliver genetic material into cells. It consists of a protein capsid enclosing a DNA genome [1]. The first AAV-based gene therapy was approved in Europe in 2012 [3], highlighting the relatively recent emergence of these products. Consequently, the regulatory framework governing AAV-based therapies is still evolving and remains an area of active discussion.

One critical quality attribute for AAV products is the ratio of full to empty capsids in the final drug product. This parameter is increasingly scrutinized due to its potential implications for product quality [4–6].

This article provides a concise overview of current regulatory expectations regarding the AAV full/empty capsid ratio, summarizes the positions of major health authorities, and highlights key challenges related to its analytical assessment.

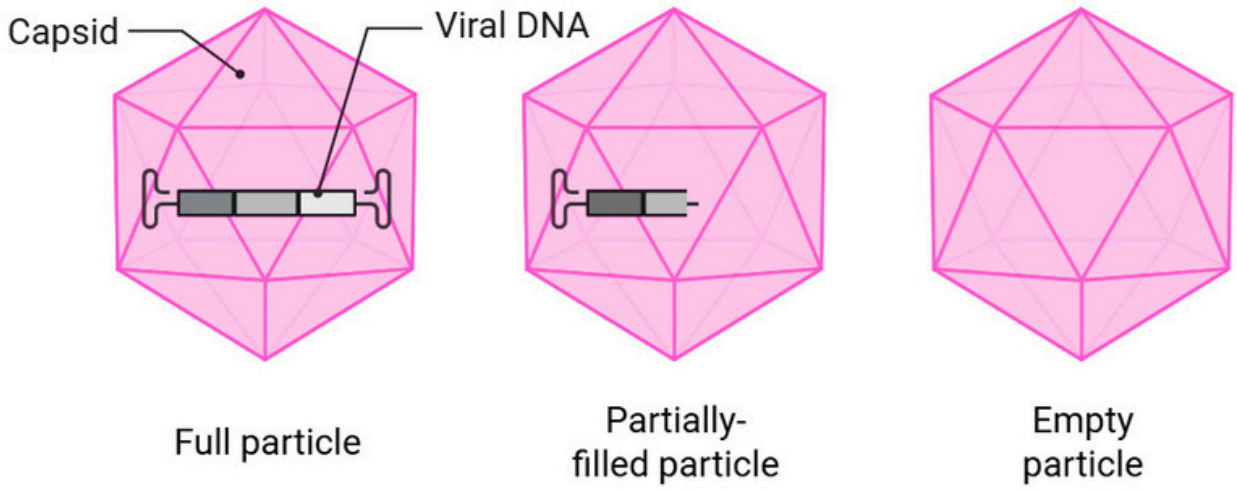

Figure 1. Schematic of different AAV capsid populations.

Discussion

AAV preparations typically consist of a heterogeneous mixture of capsid species, including empty, partially filled, and full particles, depending on the DNA content encapsulated within the viral capsid (Figure 1). Empty capsids, which lack a packaged nucleic acid genome, can represent between 50% and 90% of total particles produced in cell culture systems [4,7,8]. Given this heterogeneity, the proportion of empty versus full capsids is a critical parameter to evaluate during process development and product characterization. Empty capsids may negatively impact efficacy by competing with genome-containing particles for binding to target cells, potentially reducing transduction efficiency and increasing the required therapeutic dose [9,10]. Conversely, some studies suggest that empty capsids may act as decoys, protecting functional AAV particles from immune clearance and thereby enhancing overall gene transfer efficiency [11,12]. From an immunological perspective, capsid-derived peptides can be presented by major histocompatibility complex (MHC) molecules, leading to recognition and elimination of transduced cells by capsid-specific CD8+ T cells. While such immune responses have been documented in humans, they are not solely attributable to empty capsids, as total capsid load also plays a significant role [13].

Taken together, these sometimes-conflicting observations highlight the complexity of defining an optimal full/empty capsid ratio and underscore the importance of its careful control as a critical quality attribute. This scientific uncertainty, combined with its potential impact on both efficacy and safety, has led regulatory authorities to increasingly focus on the characterization and monitoring of this parameter. However, the regulatory framework addressing the full/empty capsid ratio remains relatively non-prescriptive.

In Europe, the general monograph on Gene Therapy Medicinal Products (Ph. Eur. 3186) states that full and empty particles should be quantified either indirectly – through the ratio of capsid titre to vector genome titre – or via suitable analytical methods such as analytical ultracentrifugation (AUC) or size-exclusion chromatography coupled with multi-angle light scattering (SEC-MALLS). Acceptance criteria are defined on a product-specific basis [14]. Similarly, the 2018 EMA guideline on gene therapy products requires the determination of total and functional viral particles but does not define specific thresholds for acceptable full/empty ratios [15]. In the United States, the FDA considers empty capsids as product-related impurities that should be quantified and controlled. While the agency does not prescribe specific analytical methods or acceptance criteria, it emphasizes the importance of monitoring ratios such as full-to-empty particles or total particles-to-infectious units [16,17]. Table 1 shows extracts of the different regulations mentioned above.

Table 1. Extracts from EU and US regulatory guidelines regarding full and empty AAV particles.

EU Regulations	US Regulations
Ph. Eur. 3186 [14]	**FDA Guideline 2020 [16]**
Full and empty particles. Full and empty particles are determined by calculation of the ratio between the capsid titre and vector genome titre or by a suitable method such as analytical ultracentrifugation or size-exclusion chromatography (2.2.30) with multi-angle laser light scattering detection (SEC-MALLS). Full and empty particles are within the limits approved for the particular product.	For viral vectors, typical product-related impurities may include defective interfering particles, non-infectious particles, empty capsid particles, or replicating recombinant virus contaminants. These impurities should be measured and may be reported as a ratio, for example, full particles or virus particles units.
EMA Guideline 2018 [15]	**USP <1047> [17]**
For viral vectors, infectious titre should be quantified; the number of particles (infectious/non-infectious, empty/genome containing) should also be determined. Particle to infectivity impact on safety and ratio should be included to define the content of the drug substance.	For viral vector systems that have capsomeric symmetry that requires the appropriate nucleic acid incorporation for configuration, empty particles may be readily distinguished from those carrying genomes.

As an initial overview, several orthogonal analytical methods are currently employed to assess the full-to-empty capsid ratio in rAAV preparations [18,19,20], each with distinct advantages and limitations in terms of resolution, throughput, and quantification accuracy. A concise summary of these approaches is presented in Table 2.

Given the diversity of available methods and the absence of a universally accepted standard, a combination of complementary analytical techniques is often recommended to achieve a robust and comprehensive characterization of rAAV particle heterogeneity. The reader is referred to the cited literature for more detailed methodological comparisons and practical considerations [18,19,20].

Table 2. Analytical methods for evaluating the full-to-empty capsid ratio in AAV preparations: advantages and limitations.

Method	Key advantages	Main limitations
Analytical ultracentrifugation (AUC)	High resolution, gold standard	Low throughput, specialized equipment
Transmission electron microscopy (TEM)	Direct visualization	Low throughput, sample preparation artefacts
Cryo-electron microscopy (Cryo-EM)	Native-state visualization, high resolution	Very low throughput, high cost
Anion-exchange chromatography (AEX)	High throughput, scalable	Limited quantitative accuracy
Size-exclusion chromatography coupled with multi-angle light scattering (SEC-MALS)	Good resolution, quantitative	Requires optimization per serotype
Charge detection mass spectrometry (CD-MS)	Single-particle mass accuracy	Emerging technique, limited accessibility
Comparison of vector genome titers and capsid titers (qPCR/ddPCR + ELISA/OD)	Widely accessible, routine use	Indirect measurement, method variability

Conclusion

Despite increasing regulatory attention, current guidelines from both European and US authorities remain non-prescriptive, leaving significant flexibility to sponsors. Regulatory agencies consistently emphasize the importance of minimizing empty capsids and implementing robust manufacturing and purification processes, but no universal acceptance criteria have been defined. Instead, expectations are assessed on a case-by-case basis, taking into account factors such as dose, route of administration, and clinical indication.

At the same time, important scientific and technical challenges remain unresolved. In particular, the diversity of analytical methods currently used to assess full/empty capsid introduces significant variability in results. Questions regarding method comparability, accuracy, and suitability for regulatory decision-making remain largely open, contributing to an additional layer of uncertainty beyond the definition of acceptable specifications.

In this context, further alignment between regulatory authorities, along with continued methodological and clinical investigations, will be essential to support the development and standardization of AAV-based therapies. The growing complexity and lack of harmonization in analytical strategies suggest that the evaluation of full/empty capsid ratios may, in itself, warrant dedicated discussion, as it remains a critical yet insufficiently resolved aspect of AAV product characterization.

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Strand Scientific Journal, Issue 1, September 2026

Expertise, prosocial behaviour, and authentic help-seeking: re-thinking networking in professional contexts

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Introduction

Professional networking is frequently associated with self-interest and strategic exchange. However, emerging research suggests that the most effective networks are built not on transactional motives but on expertise, generosity, and shared values. Expertise and authentic human connection play a central role in shaping professional opportunities

Thanks to Adam Grant's interview in WorkLife by Molly Graham [1], this article synthesizes elements on how individuals build influence through expertise, adopt deeper relational mindsets, and leverage helping behaviours – both giving and requesting help – to strengthen their networks. We also examine gendered disparities in "office housework" and discuss structured reciprocity mechanisms such as the Reciprocity Ring. Practical recommendations are proposed to foster sustainable, value-driven networking practices.

Discussion

1. Expertise as a Catalyst for Network Formation

Expertise is a powerful predictor of network growth. Studies in hospital settings show that radiologists who excelled at their work formed more new connections over nine months and occupied more central positions in organizational networks [1,2]. Expertise provides:

- Credibility: People naturally seek out "mavens" for guidance.
- Reciprocity potential: Knowledge-sharing fosters mutual benefit.
- Network magnetism: Individuals value having experts to consult—whether for buying a car, planning international travel, or proofreading important documents.

Thus, who you know tomorrow depends in part on what you know today. Expertise gives others a reason to include you in their networks.

2. Relational Mindsets: From Transactional to Meaningful Connections

There are four mindsets that shape how individuals approach networking as shown in Table 1. The highest form of connection emerges when individuals share a broader mission or worldview, creating durable, value-driven relationships.

Table 1. The four mindsets that shape how individuals approach networking.

Relational Mindsets Sub-types	Sub-types
Transactional Mindsets	• Immediate trade: expectation of instant exchange • Narrow transaction: "I'll do this for you, and you'll do something for me later" These approaches limit trust and long-term relational depth.
Meaningful Mindsets	• Alliance-building: Investing jointly in friendships and long-term relationships • Value-based helping: Supporting others because one believes in their mission or values

3. Helping as a Mechanism for Network Development

The Power of Giving

Adam Grant (2019) highlighted that givers—those who help without expecting immediate returns—build stronger reputations and more resilient networks than takers (who burn bridges with their selfishness) or matchers (who trade favors quid pro quo and come across as pretty transactional because they keep score).

A number of studies show that people who give more than they get earn more status and social capital. But they actually care; they don't give to get something. Besides, helping others solve work-related problems enhances one's own performance by providing practice in problem-solving and generating new insights.

Risks and Gendered Inequities

Helping is not universally beneficial. There are certain ways that becoming a big helper can backfire, especially for women. Women receive 44% more requests for "thankless tasks" such as note-taking or event planning and face stronger penalties when declining [1]. These tasks rarely contribute to skill development, making them detrimental to career progression. Women also feel more pressure to say yes, and they get penalized more if they say no, because it violates gender stereotypes of women as caring. The boundary condition is clear: helping is beneficial when it involves learning; it becomes costly when it does not.

The Limits of Emotional Support

Task-related helping fosters learning, but emotional venting ("my boss sucks") is cognitively draining and narrows problem-solving capacity. Emotional labor does not strengthen networks in the same way. Helping others with task-related problems gives you practice at problem-solving. But there is a wrinkle: those benefits don't apply to a different kind of help: giving emotional support.

When people are venting, it could narrow the way that we think about problems; it doesn't allow to learn.

4. Help-Seeking as a Strategy for Network Expansion

Authentic Requests

Asking for help can deepen networks when done sincerely. Emphasizing why the request matters—rather than what the other person gains—makes the interaction meaningful and energizing. Seeking advice is one of the best ways to recruit an advocate. It makes people feel important and it makes you look smart. With one important caveat: the ask needs to be authentic.

The Reciprocity Ring

The Reciprocity Ring—created by sociologist Wayne Baker [3]—operationalizes collective generosity. Participants articulate a need they cannot meet alone, and others mobilize their knowledge and networks to help. This structure:

- Encourages prosocial behaviour
- Reveals hidden resources
- Builds lasting community ties

Organizing such an exercise can create a culture of generosity that extends beyond the event itself.

5. Strategies for Effective Outreach and Reconnection

Capturing Attention (Reid Hoffman's Principles)

When reaching out to strangers:

- Clarify your purpose: Be specific about why you are contacting them.
- Offer value: Frame the interaction as a collaboration, not a request.
- Avoid premature intensity: Proposing a major project too early can feel intrusive.

Reconnecting

When re-establishing contact, remind the person of what you valued in past interactions and explain what brings you back to them now.

Expressing Gratitude

Sending a thank-you note promptly—ideally within an hour—reinforces the relationship and demonstrates professionalism. Sharing how their advice helped you strengthen the connection.

Conclusion

Networking is most effective when grounded in expertise, authenticity, and generosity. Moving beyond transactional exchanges toward meaningful, value-driven relationships fosters stronger, more sustainable networks. Helping others—and asking for help sincerely—creates opportunities for learning, collaboration, and long-term professional growth.

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