MODS MAX for Scalp and Skin Absorption: Evidence Review, Adjunct Options, and Proof Plan

Executive summary

MODS MAX is a plausible topical/scalp delivery platform, but the strongest public evidence today supports it as a promising development hypothesis rather than a proven claim of topical absorption. Public MODS materials describe MODS MAX as a patent-pending mineral oxide or mineral oxychloride delivery system designed to improve bioavailability, while a public company filing states that the process is compatible with sublingual, oral, nasal, and topical delivery formats and claims over 5,000 patient-uses with no serious adverse events reported (MODS Max, Best365 Labs Wholesale, BioScience Health Innovations 10-K summary). The gap is that no independent peer-reviewed topical or scalp MODS MAX pharmacokinetic, Franz-cell, follicular retention, or split-scalp clinical study was found in this search, so the honest position is that the mechanism is plausible, the delivery category is real, but the specific topical MODS MAX claim still needs a direct study.

The broader skin-delivery literature strongly supports the idea that absorption can be improved by chemical penetration enhancers, vesicles, nanoparticles, hydration/occlusion, microneedling, laser/energy-assisted delivery, sonophoresis, iontophoresis, and follicle-targeting systems (Enhancement strategies for transdermal drug delivery systems, Improved Topical Drug Delivery). For scalp and hair, the follicle matters because hair follicles can act as reservoirs and portals for topically applied compounds, while nanoparticle systems can increase follicular deposition and sustained release (Hair follicle-targeting drug delivery strategies). This supports the Best365 opportunity: MODS MAX should be studied not only as "more absorption," but as "better scalp/skin retention, better follicular delivery, and better active delivery into the target compartment."

The most defensible development direction is MODS MAX plus a clean topical formulation base, then testing against MODS MAX plus one adjunct at a time. The highest-yield adjuncts are likely a lipid/vesicle or hydrogel base, modest hydration/occlusion, carefully selected natural enhancers such as low-dose terpenes or urea, and clinician-supervised microneedling for scalp delivery (Natural Ingredients of Transdermal Drug Delivery Systems, Transdermal Delivery of Drugs with Microneedles). Photobiomodulation may help hair biology through mitochondrial and Wnt/beta-catenin signaling, but it should be framed as a biologic adjunct rather than a proven penetration enhancer for MODS MAX unless tested directly (Photobiomodulation for the management of alopecia, PBMT and beta-catenin hair follicle activation).

The no-bull recommendation is to avoid DMSO-style hype. DMSO is a real penetration enhancer and can increase permeation of both hydrophilic and hydrophobic molecules, but it is also indiscriminate, formulation-sensitive, odor-prone, irritation-prone at higher concentrations, and not ideal for a clean consumer scalp product (Enhanced Skin Permeation of Estradiol by DMSO). If Best365 wants to win

this category, the better path is to prove MODS MAX with Franz diffusion, skin-retention, follicular-cast/tape-stripping, and a small split-scalp pilot instead of making large absorption claims before the data exist.

What MODS MAX can fairly say today

Public MODS MAX materials describe the technology as a patent-pending platform for improved absorption and elevated bioavailability, especially for peptides, amino acids, vitamins, minerals, and botanicals in formats such as liquid shots and sublinguals (MODS Max). Best365's wholesale site describes MODS MAX as a mineral oxide delivery system using mineral oxychlorides to generate microdose reactive oxygen species that transiently open biological barriers for rapid uptake while maintaining safety and stability (Best365 Labs Wholesale). A public company filing states that MODS MAX is compatible with sublingual, oral, nasal, and topical delivery formats, and also states that conventional oral supplements deliver 10 to 20 percent of actives while MODS MAX sublingual formulation can achieve 60 to 90 percent bioavailability (BioScience Health Innovations 10-K summary).

Those statements help frame the platform, but they are not the same as a topical scalp absorption study. The public Best365 wholesale page mentions GLOW Recovery Peptide Serum with 150 mg GHK-Cu, 10 mg BPC-157, and 10 mg TB-500 per bottle using MODS MAX absorption technology to support the appearance of healthy, rejuvenated skin, but the page does not provide scalp-specific pharmacokinetic data, Franz-cell data, follicular-retention data, or independent clinical outcomes (Best365 Labs Wholesale). That means the cleanest claim is: "MODS MAX is being developed as a delivery platform for topical and scalp applications, and the next proof step is direct skin and follicular testing."

Why scalp and skin delivery is hard

The skin is designed to keep things out. The stratum corneum is the main barrier, and successful topical delivery generally requires the active to partition into that layer, diffuse through it, and reach the viable epidermis, dermis, follicles, or the systemic circulation, depending on the goal (Enhancement strategies for transdermal drug delivery systems). Many transdermal products work best when the active is potent, small, moderately lipophilic, and required at a low daily dose, whereas hydrophilic molecules and larger peptides encounter a much harder barrier (Improved Topical Drug Delivery).

The scalp introduces a second issue: the hair follicle can be a target, but it is not automatically reached simply by rubbing the scalp. Hair follicles can act as reservoirs and portals, but sebaceous material, particle size, vehicle design, skin condition, and follicular obstruction can change how much of the active actually reaches the follicular compartment (Hair follicle-targeting drug delivery strategies). This is why a MODS MAX scalp product should be measured by active retention in skin and follicles, not just by whether a serum feels active on the skin.

Evidence map: MODS MAX claim versus what still needs to be proven

Topic	What public materials support	What remains unproven for scalp/skin	Practical next step
Platform concept	MODS MAX is described publicly as a patent-pending absorption platform for peptides, vitamins, amino acids, minerals, botanicals, and bioactives (MODS Max).	Independent topical/scalp penetration data were not found in this search.	Run Franz diffusion and skin-retention testing with the actual topical formula.
Mechanism	Best365 describes mineral oxychlorides and microdose ROS that transiently open biological barriers (Best365 Labs Wholesale).	Whether that mechanism increases active delivery through stratum corneum or into scalp follicles has not been shown publicly.	Measure barrier effect by TEWL, skin irritation, tape stripping, and active quantification.
Topical compatibility	A filing states MODS MAX is compatible with topical formats (BioScience Health Innovations 10-K summary).	Compatibility does not prove absorption, follicular targeting, or clinical benefit.	Test topical MODS formula versus identical non-MODS formula.
Safety	A filing states more than 5,000 MODS patient-uses with zero serious adverse events reported (BioScience Health Innovations 10-K summary).	Topical safety on scalp, irritated skin, microneedled skin, and long-term repeated use remains formulation-specific.	HRIPT or repeat-insult patch testing, irritation scoring, microbial testing, and clinician-supervised pilot.
GLOW topical product	Best365 lists a GHK-Cu/BPC-157/TB-500 serum using MODS MAX absorption technology for skin appearance support (Best365 Labs Wholesale).	Degree of penetration, follicular retention, systemic exposure, and clinical skin outcome are not presented publicly.	Use GHK-Cu as a measurable marker in skin-retention and follicular-cast testing.

What the broader literature says supports MODS MAX development

Chemical penetration enhancers

Chemical penetration enhancers can improve topical delivery by disrupting stratum-corneum lipids, altering keratin, changing drug partitioning, increasing hydration, or modifying solvent behavior in the skin (Enhancement strategies for transdermal drug delivery systems). Common classes include alcohols, propylene glycol, oleic acid and other fatty acids, surfactants, urea, terpenes such as menthol and limonene, DMSO, azone-like compounds, and pyrrolidones (Enhancement strategies for transdermal drug delivery systems). The problem is that stronger enhancers are often more irritating, so the best enhancer is not the one that opens skin the most; it is the one that improves delivery while letting the barrier recover quickly (Improved Topical Drug Delivery).

For a Best365 scalp product, the safer first choices are not harsh solvent systems. Urea at 2 to 10 percent is mainly moisturizing, while 10 to 20 percent can add keratolytic and penetration-enhancing effects; terpenes can improve hydrophilic and lipophilic delivery but carry irritation risk when undiluted or too concentrated; polysaccharides and hyaluronic acid can support hydration and hydrogel delivery with a better consumer-safety posture (Natural Ingredients of Transdermal Drug Delivery Systems). Oleic acid can disrupt stratum-corneum lipid organization, but its enhancement effect is inconsistent across actives, so it should be tested rather than assumed (Natural Ingredients of Transdermal Drug Delivery Systems).

Vesicles, liposomes, ethosomes, transfersomes, and nanocarriers

Vesicle and particle systems can encapsulate hydrophilic or hydrophobic compounds, improve stability, increase skin retention, and sometimes fuse with stratum-corneum lipids to improve penetration (Enhancement strategies for transdermal drug delivery systems). Liposomes, ethosomes, transethosomes, transfersomes, niosomes, phytosomes, microemulsions, solid lipid nanoparticles, and nanostructured lipid carriers are all established delivery categories, but they have manufacturing, stability, size-control, reproducibility, cost, and safety limitations (Enhancement strategies for transdermal drug delivery systems, Improved Topical Drug Delivery).

For scalp products, follicular nanocarriers are especially relevant because drug-loaded nanoparticles can accumulate in follicular openings and function as reservoirs for controlled diffusion (Hair follicle-targeting drug delivery strategies). A follicular-delivery review reports that particle size, surface charge, carrier composition, drug solubility, follicle blockage, and skin model all influence results, which means Best365 should not assume that any one nanoparticle or mineral oxide approach automatically targets the follicle (Methodologies to Evaluate Hair Follicle-Targeted Drug Delivery).

Mineral oxides and nanoparticles

Metal and metal-oxide nanoparticles have dermato-cosmetic and therapeutic potential, but the field repeatedly emphasizes the need to balance benefit with toxicity and safety testing (Therapeutic Applications of Metal and Metal-Oxide Nanoparticles). Zinc oxide nanoparticle sunscreen studies have often shown no or limited penetration through intact skin, but concerns remain about particle behavior, soluble ions, damaged skin, and biological impact depending on formulation and model (Dermal absorption and biological impact of ZnO sunscreen particles). Other nanoparticle reviews warn that metallic nanoparticles used in dermatology and cosmetology raise concerns about transdermal toxicity, skin-cell interactions, and immune responses (Evaluation of immunoresponses and cytotoxicity from skin exposure to metallic nanoparticles).

That does not mean mineral oxide delivery is unsafe. It means the exact mineral species, size, charge, concentration, soluble-ion release, ROS behavior, pH, osmolality, purity, heavy metals, endotoxin, microbial contamination, and damaged-skin exposure all matter. For MODS MAX, the correct scientific posture is to treat the mineral oxide/oxychloride system as a formulation platform that must be characterized and tested for the specific route, active, dose, and skin condition.

Microneedling and pin rollers

Microneedling is one of the most credible ways to increase topical/scalp delivery because it bypasses or perforates the stratum corneum by creating microchannels, and it can help deliver small molecules, large molecules, proteins, peptides, vaccines, and other biopharmaceuticals depending on device type and formulation (Transdermal Delivery of Drugs with Microneedles, Microneedles as transdermal drug delivery systems). Microneedling has additional hair-growth relevance because the controlled injury can induce growth factors, neovascularization, and wound-healing signals even apart from delivery (Review of applications of microneedling in dermatology).

The hair literature is strongest for microneedling plus minoxidil. In one 12-week randomized study of 68 male androgenetic alopecia patients, microneedling plus 5 percent minoxidil increased mean hair count by 12.82 ± 6.82 compared with 1.89 ± 8.94 for minoxidil alone, with mild pain and discomfort but no serious adverse events reported (Kumar et al. microneedling plus minoxidil RCT). A 2025 meta-analysis concluded that microneedling plus minoxidil significantly improved hair count and hair diameter compared with minoxidil alone, although adverse events were more frequent and generally mild or self-limiting (Microneedling plus minoxidil meta-analysis).

The practical issue is that a pin roller makes the product both more powerful and more risky. Microneedle reviews emphasize that microchannels should close soon after needle removal to reduce entry of undesired toxic substances and infection, and they note concerns about irritation, microbial contamination, misuse, device reuse, and infection risk (Transdermal Delivery of Drugs with Microneedles). A 2024 review notes that solid microneedles can carry infection risk and require sterilization, while different microneedle systems have limitations such as dosing capacity,

inconsistent pharmacokinetics, material safety, or crosslinker toxicity (Microneedles as transdermal drug delivery systems).

Recommendation on pin roller use

For consumer use, the safest posture is not "roll hard and drive it in." The safest posture is: gentle cosmetic-depth needling only; single-user device; clean scalp; no active infection, no open wounds, no immunosuppression without clinician approval, and no application of nonsterile or high-risk ingredients into fresh channels. For clinical use, a pen or stamp is usually more controlled than a roller because the depth and vertical entry can be better standardized, while rollers can create angled channels and more tearing depending on technique. **I have a great stamp microneedle apparatus with blue and red lights. The roller causes sheer tears in the scalp and ruins the hair.**

The best Best365 research design would compare four conditions: active alone, active plus MODS MAX, active plus MODS MAX after standardized clinical microneedling, and active plus MODS MAX plus a non-needling adjunct such as PBM or hydration. This would show whether MODS MAX adds delivery, whether microneedling adds more, and whether the combination creates more irritation than benefit.

Light therapy and PBM

Photobiomodulation is relevant to scalp health, but it should not be sold as a proven MODS MAX penetration enhancer unless a study proves it. PBM/LLLT has been studied for androgenetic alopecia, with proposed mechanisms involving mitochondrial stimulation in hair-follicle stem cells, ROS signaling, mitochondrial biogenesis, and increased transition into anagen phase (Photobiomodulation for the management of alopecia). A mechanistic PBM study found that PBM can activate hair follicle stem cells by upregulating beta-catenin, with PBM-induced ROS activating PI3K/AKT/GSK-3beta signaling and Wnt secretion from skin-derived precursors supporting hair regeneration in the model studied (PBMT and beta-catenin hair follicle activation).

Clinical PBM evidence is positive but uneven. A PBM review summarized multiple clinical studies using red or near-infrared devices and reported improvements in hair density in several trials, but it also warned that PBM remains contentious, that some studies are small, that bias is possible, that treatment takes months, and that companies often create unrealistic expectations (Photobiomodulation for the management of alopecia). That makes PBM a good Foundation First-style adjunct: it may support mitochondrial and follicle biology, but it is not a magic beam and should not be framed as a substitute for the right topical formulation or the right proof study.

Recommendation on light use

PBM should be positioned as "biologic support for follicles and mitochondria," not as "the light pushes MODS through the skin." A clean practical protocol would apply the topical product to clean scalp, allow it to dry, and use PBM separately or after drying, while a formal study would define

whether PBM is used before, after, or on alternate days. If Best365 wants to claim synergy, the split-scalp pilot should include a MODS MAX-only side and a MODS MAX-plus-PBM side with standardized photography and trichoscopy.

DMSO and safer DMSO-like alternatives

DMSO is a legitimate dermal penetration enhancer. It is amphiphilic, interacts with membranes, increases bilayer fluidity at lower concentrations, can create water pores and extract lipids at higher concentrations, and increased estradiol permeation nearly fourfold in one transdermal-patch study (Enhanced Skin Permeation of Estradiol by DMSO). The same DMSO paper also highlights why it is not an ideal consumer-product answer: volatility, storage instability, formulation difficulty, local irritation, garlic-like breath, possible dry skin, and histopathological changes at high concentrations in some studies (Enhanced Skin Permeation of Estradiol by DMSO).

The safer alternative is not to find "the new DMSO." The safer alternative is to use a layered delivery strategy: clean vehicle, skin-compatible enhancers, follicular targeting, measured hydration, and optional clinician-supervised device assistance. Ionic liquids and deep eutectic systems are promising because they can act as solubilizers, absorption enhancers, antibacterial agents, and stabilizers, but their clinical use is limited by toxicity concerns, incomplete mechanism clarity, and lack of standardized evaluation (Design Principles and Applications of Ionic Liquids for Transdermal Drug Delivery). Choline- and fatty-acid-based ionic liquids, propylene glycol/oleic systems, Transcutol-like solvents, terpenes, hyaluronic acid hydrogels, chitosan systems, liposomes, ethosomes, transferosomes, and nanostructured lipid carriers are more development-friendly than consumer DMSO, but each still needs formulation-specific safety and permeation testing (Enhancement strategies for transdermal drug delivery systems, Natural Ingredients of Transdermal Drug Delivery Systems, Design Principles and Applications of Ionic Liquids for Transdermal Drug Delivery).

Adjunct options ranked for Best365

Adjunct	Likely value	Risk level	Best use	No-bull verdict
Optimized hydrogel or serum base	Improves contact time, hydration, spread, and user compliance; hydration can reduce diffusional resistance (Enhancement strategies for transdermal drug delivery systems).	Low to moderate.	First-line formulation platform.	Start here before devices.

Hyaluronic acid / polysaccharide hydrogel	Supports hydration and can modify barrier behavior for hydrophilic actives (Natural Ingredients of Transdermal Drug Delivery Systems).	Low if clean and preserved.	Scalp/skin serum, post-procedure support.	Good consumer-safe base.
Urea 5-10 percent	Moisturizing and mild barrier support; higher concentrations become more keratolytic (Natural Ingredients of Transdermal Drug Delivery Systems).	Low to moderate, depending on concentration and irritated skin.	Dry/scaly scalp or skin barrier conditions.	Useful, but avoid too harsh a dose for daily scalp use.
Low-dose terpene/menthol/eucalyptol system	Can improve delivery of hydrophilic and lipophilic actives by interacting with stratum-corneum lipids (Natural Ingredients of Transdermal Drug Delivery Systems).	Moderate due to irritation risk.	Small-dose enhancer after irritation testing.	Promising but test carefully.
Liposomes/ethosomes/transfersomes	Can improve delivery and retention of different actives (Enhancement strategies for transdermal drug delivery systems).	Moderate due to stability and manufacturing issues.	Premium formula or research arm.	Strong platform if manufacturer can control size and stability.
Nanostructured lipid carriers	Follicular delivery and sustained release are plausible for scalp products (Hair follicle-targeting drug delivery strategies).	Moderate due to particle characterization and safety requirements.	Scalp/hair active delivery.	High upside, needs real formulation science.

Microneedling / pin roller	Strongest clinical adjunct evidence in hair when paired with minoxidil (Kumar et al. microneedling plus minoxidil RCT, Microneedling plus minoxidil meta-analysis).	Moderate to high if nonsterile, too deep, or used on irritated skin.	Clinician-supervised scalp protocol or carefully limited cosmetic-depth consumer use.	Powerful, but do not turn a serum into an infection risk.
PBM / red-light therapy	May support mitochondrial and follicle biology through ROS/Wnt/beta-catenin mechanisms (Photobiomodulation for the management of alopecia, PBMT and beta-catenin hair follicle activation).	Low to moderate, device-dependent.	Adjunct to hair biology, not primary penetration enhancer.	Good support tool; do not overclaim delivery.
DMSO	Real enhancer with strong membrane effects (Enhanced Skin Permeation of Estradiol by DMSO).	Moderate to high for consumer scalp product.	Research comparator, not preferred consumer ingredient.	Use as benchmark, not brand identity.
Ionic liquids/deep eutectic solvents	Promising solubilizer/enhancer class with tunable chemistry (Design Principles and Applications of Ionic Liquids for Transdermal Drug Delivery).	Moderate to high until specific formulation is tested.	R&D arm with toxicology and irritation testing.	Future platform, not quick OTC shortcut.
Sonophoresis/iontophoresis	Can enhance drug delivery through energy-driven mechanisms (Enhancement strategies for transdermal drug delivery systems).	Moderate due to device and protocol complexity.	Clinic/research use.	Interesting, but not first move for Best365.

Safe protocol tiers

Consumer-safe concept

The safest consumer version is a clean MODS MAX topical serum with a scalp-friendly vehicle, conservative preservatives, pH compatible with skin, no aggressive DMSO-like solvent load, and no medical claims beyond cosmetic appearance support unless claims are supported by data. A light hydration strategy, such as applying to clean slightly damp scalp or using a non-occlusive serum base, is reasonable because hydration can increase permeability and improve contact time (Enhancement strategies for transdermal drug delivery systems). Consumer microneedling should be optional, conservative, single-user, cosmetic-depth, and avoided on broken, infected, inflamed, bleeding, or immunocompromised skin because microneedling creates channels that can allow unwanted substances or microorganisms to enter (Transdermal Delivery of Drugs with Microneedles).

Clinician-supervised concept

The clinician version can use controlled microneedling, defined needle depth, standardized cleaning, post-procedure timing, and adverse-event monitoring. The hair-loss microneedling evidence often used 5 percent minoxidil with needling, and one trial instructed patients not to apply minoxidil on the day of needling and to resume 24 hours later, which is a useful safety precedent when deciding how soon to apply active products after creating channels (Kumar et al. microneedling plus minoxidil RCT). For MODS MAX, Best365 should test immediate application versus delayed application rather than assume that applying directly over fresh channels is best.

Research-only concept

Research-only combinations include MODS MAX plus stronger chemical enhancers, DMSO comparator arms, ionic liquids, deep eutectic solvents, sonophoresis, iontophoresis, laser-assisted delivery, or microneedling plus peptide-rich formulas. These may be valuable scientifically, but they should be treated as R&D until irritation, sensitization, microbial, systemic exposure, and follicular-delivery data exist. FDA guidance states that microneedling guidance helps industry determine when a microneedling product is a medical device under the FD&C Act, so claims and device pairings should be reviewed before marketing (FDA microneedling regulatory guidance).

The proof plan Best365 should run

Stage 1: Bench and formulation characterization

The first stage should define exactly what is being tested. MODS MAX formulas should be characterized for pH, osmolality, oxidation-reduction potential, peroxide or reactive oxygen species behavior if relevant, particle/mineral characterization, viscosity, stability, microbial quality, heavy metals, endotoxin, preservative effectiveness, and active concentration. This is especially important because metal/mineral oxide systems depend on size, soluble-ion behavior, surface chemistry, and skin state, and nanoparticle reviews repeatedly warn that safety and biological behavior are formulation-specific (Therapeutic Applications of Metal and Metal-Oxide Nanoparticles, Evaluation of immunoresponses and cytotoxicity from skin exposure to metallic nanoparticles).

Stage 2: Franz diffusion plus skin-retention study

The core proof study should use porcine ear skin and, if budget allows, human cadaver scalp or excised human skin. Porcine skin is widely used for follicular permeation studies, while human skin has obvious relevance but suffers from donor variability and follicular contraction after excision (Methodologies to Evaluate Hair Follicle-Targeted Drug Delivery). The study should compare active alone, vehicle alone, active plus MODS MAX, active plus MODS MAX plus safe enhancer, and active plus MODS MAX after standardized microneedling.

The endpoints should include receptor-fluid concentration, total skin retention, stratum-corneum tape stripping, follicular-cast recovery with cyanoacrylate, and active concentration by LC-MS/HPLC/ICP-MS depending on the active. Differential stripping can separate stratum-corneum content from follicular casts, and the follicular targeting factor can compare how much of the active is in follicles versus total skin (Methodologies to Evaluate Hair Follicle-Targeted Drug Delivery). This is the study that lets Best365 honestly say: “MODS MAX increased skin retention by X percent” or “MODS MAX increased follicular deposition by X percent” for a specific formula.

Stage 3: Safety testing

The safety stage should include repeat irritation, sensitization, microbial testing, preservative effectiveness, damaged-skin caution, and eye/mucosal caution if any product may migrate. Microneedle-related products require special attention because microchannels can allow entry of unwanted substances or microorganisms, and device reuse or poor sterilization increases contamination risk (Transdermal Delivery of Drugs with Microneedles, Microneedles as transdermal drug delivery systems).

Stage 4: Small split-scalp pilot

The fastest credible scalp pilot is a split-scalp design in 10 to 20 subjects for 12 to 16 weeks. One side receives active plus vehicle and the other side receives active plus MODS MAX, with standardized photos, trichoscopy, hair density, hair shaft diameter, shedding count, irritation score, itch score, and adverse-event log. If PBM is tested, it should be applied symmetrically or assigned as a separate randomized condition so that light does not confuse the MODS signal. If microneedling is tested, it should be standardized by depth, device, interval, cleaning protocol, and timing of topical application.

Suggested claims ladder

Claim level	Example wording	Evidence needed
Safe today	"MODS MAX is being developed as a delivery platform for topical and scalp applications."	Public platform materials and topical-compatibility statement (MODS Max, BioScience Health Innovations 10-K summary).
Reasonable but cautious	"Topical delivery science supports the idea that formulation, hydration, vesicles, nanoparticles, and microneedling can change skin and follicular delivery."	Transdermal and follicular-delivery literature (Enhancement strategies for transdermal drug delivery systems, Hair follicle-targeting drug delivery strategies).
Needs internal data	"MODS MAX increased skin retention of this active by X percent."	Franz diffusion and skin-retention study with the actual formula.
Needs stronger data	"MODS MAX increased follicular delivery by X percent."	Tape stripping plus follicular-cast recovery or biopsy with active quantification.
Needs clinical pilot	"MODS MAX improved hair density, scalp appearance, or skin appearance."	Split-scalp or controlled clinical study with photos, trichoscopy, and adverse-event monitoring.
Avoid until proven	"MODS MAX drives peptides through the scalp better than injections" or "MODS MAX makes peptides work like stem cells."	Not supported by current public evidence and too risky scientifically/regulatorily.

Best product-development recommendation

The best first product-development path is not MODS MAX plus everything. The best path is MODS MAX plus a clean topical base, then one controlled adjunct at a time. A strong first scalp study would test a measurable active such as caffeine, minoxidil comparator, GHK-Cu, or another quantifiable marker in a MODS and non-MODS formula; then add a microneedling arm only after the baseline MODS effect is known. This keeps the science clean because otherwise the team will not know whether the benefit came from MODS, hydration, microneedling, light, or the active itself.

The best clinical positioning is: "Delivery matters, but biology still matters." MODS MAX may help a product get where it needs to go, PBM may support follicle mitochondrial signaling, microneedling

may open a temporary path, and follicular nanocarriers may improve local retention, but none of those replace nutrition, hormones when appropriate, inflammation control, sleep, metabolic health, and scalp diagnosis. That is the Foundation First angle: a delivery platform should strengthen the foundation, not become another miracle story.

Bottom line

MODS MAX has a real opportunity in skin and scalp delivery because the problem it is trying to solve is real. The literature supports the larger delivery concepts: skin barriers can be modified, follicles can be targeted, microneedling can increase delivery, PBM can support hair-follicle biology, and DMSO-like enhancement is real but often too blunt for consumer use (Enhancement strategies for transdermal drug delivery systems, Hair follicle-targeting drug delivery strategies, Transdermal Delivery of Drugs with Microneedles, Photobiomodulation for the management of alopecia, Enhanced Skin Permeation of Estradiol by DMSO). The missing piece is direct MODS MAX topical proof. If Best365 runs a clean Franz/follicular-retention study and a small split-scalp pilot, it can move from “interesting delivery platform” to “measured topical delivery technology” without making the kind of overblown claims that eventually damage trust.