A SUPPLEMENT TO

JOURNAL OF DRUGS IN DERMATOLOGY

JDD

DRUGS • DEVICES • METHODS

Real-World Split-Face Case Series of a Phyto Polydeoxyribonucleotide (PDRN) Serum in Integrative Skincare

ISSN: 1545 9616

September 2026 • Volume 25 • Issue 9 (Supplement 1)

This supplement to the *Journal of Drugs in Dermatology* is supported by SkinCeuticals.

doi:10.36849/JDD.15491

September 2026 s3 Volume 25 • Issue 9 (Supplement 1)

ORIGINAL ARTICLE

Journal of Drugs in Dermatology

Real-World Cases Using Phyto Polydeoxyribonucleotide (PDRN) Serum

Yan Wu MD PhD,[a] Sophie Guénin MD MSc,[b] Elaine Fung MD,[c] Patricia Brieva PhD,[d] Xiaoning Li MD,[e] Liang-Chen Lin MD,[f] Carlos Morales Raya MD,[g] Marco Rocha MD,[h] Karim Sayed MD,[i] Todd Schlesinger MD,[j] John Sullivan MD,[k] Jill Waibel MD[l]

[a]Department of Dermatology, The First Hospital of China Medical University, Shenyang, China
[b]Department of Dermatology, Icahn School of Medicine, New York, NY
[c]Department of Surgery, Division of Otolaryngology Head and Neck Surgery, Dalhousie University, Nova Scotia, Canada, Bedford Skin Clinic, Halifax, Nova Scotia, Canada
[d]SkinCeuticals, New York, NY
[e]Department of Cosmetic Dermatology, Distinct Clinic, Beijing, China
[f]Bright Skin Clinic, Hsinchu City, Taiwan
[g]Clinica Dr. Morales Raya, Madrid, Spain
[h]Department of Dermatology, Federal University of São Paulo, São Paulo, Brazil
[i]Nomi Oslo, Oslo, Norway
[j]Clinical Research Center of the Carolinas, Charleston, SC
[k]Sutherland and St George Hospitals, Caringbah; University of New South Wales, Kensington, New South Wales, Australia
[l]Miami Dermatology and Laser Research Institute, Miami, FL

ABSTRACT

Background: Integrative skincare refers to a clinician-directed regimen that combines aesthetic procedures with appropriate post-procedure skincare. The novel phyto polydeoxyribonucleotides (PDRN) formulation combines the benefits associated with the antioxidant, soothing phyto botanical blend with the effects of PDRN, a regenerative ingredient for wound-healing with collagen-stimulating properties. The serum contains an 8% phyto botanical complex, ectoin, tripeptide-8, and a 9.7% hydrating complex (glycerin and hyaluronic acid), along with PDRN derived from *Lactobacillus sakei*, a bacterium isolated from the soil of fallen magnolia flowers. Together, these components are designed to reduce immediate post-procedure redness and erythema while providing skin-rejuvenating benefits with continued use.

Methods: Nine global expert medical doctors share their experience incorporating the serum into post-procedure care with the goal of optimizing patient outcomes and minimizing downtime. The phyto PDRN serum was evaluated in a split-face real-world protocol for post-procedure care.

Results: Eight cases were selected by the expert panel to demonstrate the use of the phyto PDRN serum in an integrative skincare treatment plan under real-world conditions. All cases demonstrated successful integration of the phyto PDRN serum into the post-procedure care of eight women with Fitzpatrick skin types II–IV and aged from 28 to 68. Patients underwent non-ablative fractional laser, Nd:YAG, microneedling, microneedling radiofrequency, and chemical peels to address their various skin concerns.

Conclusion: The phyto PDRN serum was safe, well-tolerated, and a clinically useful adjunct to integrative skin care regimens following cosmetic procedures. The antioxidant and anti-inflammatory ingredients, combined with PDRN polymers, uniquely support post-procedure recovery and skin repair.

J Drugs Dermatol. 2026;25:9(Suppl 1):s3-14.

INTRODUCTION

Inflammation and photodamage are largely considered the leading contributors to premature skin aging as they lead to decreased collagen content in the skin.[1] Collagen, the most abundant protein in the extracellular matrix (ECM) of skin, has been shown to decrease in abundance by approximately 1–1.5% per year, leading to skin aging.[1,2] Polydeoxyribonucleotides (PDRN) and polyribonucleotides (PN) are small and medium deoxyribonucleotide (DNA) or ribonucleotide (RNA) chains have been shown to boost collagen production and skin regeneration. These biopolymers have shown significant beneficial effects in wound healing, improved skin elasticity, and overall skin quality. Originating from Korea, PDRN products popularized on social media have largely been derived from the gonads of salmon species, "salmon sperm", and have been used in aesthetic medicine to improve skin texture, hydration, and repair. However, it is important to note that PDRN may also be derived from other biological material, such as human placenta or species with high biocompatibility to human genetic material. Fragments of genetic material can be formulated into gels, creams, and serums that are applied to the skin to stimulate the skin's own repair response through triggering of regenerative wound-healing mediators.

PDRN catalyzes skin regeneration largely through the stimulation of purinergic receptor signaling, A_{2A} receptors on fibroblasts.[3,4] Upon introduction into the skin, PDRNs are degraded by endogenous nucleases to generate nucleotides that bind A_{2A} receptors on fibroblasts that trigger a downstream cascade through cAMP signaling, resulting in modulation of inflammatory factors, increased expression of pro-repair mediators such as vascular endothelial growth factor (VEGF), and ECM remodelling.[3] Nucleotides may also be recycled through the salvage pathway, providing substrates for DNA synthesis in damaged or hypoxic cells to promote new DNA formation and reactive cell proliferation and growth.[3,4]

The Phyto PDRN serum (SkinCeuticals®), referred to as phyto PDRN, is a dual-action serum that aims to support skin barrier repair, hydrate, decrease skin redness, modulate inflammation, and improve repair-*associated cellular activity. The formulation contains PDRN isolated from Lactobacillus sakei (L. sakei)*, a bacteria isolated from the soil of fallen magnolia flowers with high biochemical compatibility with human repair pathways.

In addition to PDRN, the formula also includes an 8% phyto botanical blend, ectoin, tripeptide-8, and 9.7% hydrating complex (glycerin + hyaluronic acid) that supports skin hydration and barrier repair. This formulation has demonstrated 48-hour hydration and restorative effects on barrier repair. The phyto botanical component of the phyto PDRN serum has been extensively studied in patients undergoing cosmetic procedures, demonstrating synergistic and safe effects in a variety of cosmetic procedures to optimize patient outcomes.[5]

Here, we present a selection of real-world, split-face cases that describe the use of the phyto PDRN serum post-procedure in a variety of patients and clinical settings.

MATERIALS AND METHODS

Aim of the Project

This real-world case series highlights aesthetic procedures that integrate the phyto PDRN serum into pre- and post-procedure care for the appropriate patients. Expert panelists' clinical reasoning and rationale are detailed in the following patient cases to serve as a guide for dermatologists and healthcare providers seeking to apply integrated skincare practices in their patients.

Steps in the Process

The real-world cases were compiled and selected in the following steps: 1) project definition and expert panel selection, 2) data collection and preparation of patient cases, 3) patient case discussion and selection for publication, 4) literature review to support selected cases, 5) drafting, review, and finalization of the manuscript.

Role of the Panel

An expert panel of 9 medical doctors, consisting of board-certified dermatologists and plastic surgeons were selected to share patient cases using the phyto PDRN serum. Selected dermatologists had extensive experience in cosmetic and medical dermatology and represented clinical practices from across Asia, Europe, North and South America, and Australia, representing the following countries: China, Canada, Taiwan, Spain, Norway, Brazil, Australia, and the United States. Experts were selected for their experience in skin regenerative medicine and cosmetic dermatology.

Panelists met on January 29th, 2026, in Paris, France, to discuss patient cases using the phyto PDRN serum in combination with cosmetic procedures to optimize patient outcomes.

The panel used the following template to gather insight through a case-based approach:

1) Evaluation of skin concerns
2) Procedure Selection and Review of Integrative Treatment Plan
3) Post-Procedure Treatment With Phyto Corrective PDRN serum
4) Physician Clinical Assessment
5) Patient Self-Assessment
6) Special Considerations and Key Takeaways

Each panelist shared one or two cases for a total of 16 cases that were presented during the meeting. In a collaborative effort, the panel selected 8 cases to be presented in this publication. The selected cases showcase the successful use of the phyto PDRN serum paired with cosmetic procedures to improve patient outcomes and reduce patient downtime.

Phyto Corrective PDRN Serum Integrated Skincare Regimen, Split-Face Protocol

Patients were instructed to apply the phyto PDRN serum (SkinCeuticals, New York, NY) daily to the right side of the face, starting the evening after their in-office procedure. Patients were encouraged to continue with daily phyto PDRN application to the right side of their face and continue with daily moisturizer on the left side of the face. All patients were recommended to apply daily sunscreen in the morning to the full face. Patients were evaluated at day 0 pre-procedure and post-procedure, and weeks 3 and 6 post-procedure. At each visit, patient photos were taken, and a physician and subject assessment were completed. As these are real-world cases, some clinicians deviated from the suggested protocol with varying follow-up times and recorded measures.

Data Gathering and Outcome Measures

Suggested information to present included patient demographics, Fitzpatrick skin type, and the cosmetic procedure selected. Most doctors had their patients follow for 6 weeks with visits at baseline, week 3, and week 6. At each visit, physician assessment scores were recorded for the split-face (right side, left side) in the following facial attribute categories: dark spots, post-inflammatory erythema (PIE) or post-inflammatory hyperpigmentation (PIH), skin texture, radiance, fine lines, and elasticity. The scores were determined using the 10-point modified Griffiths scale for photodamage (0 = none, 1–3 = mild, 4–6 = moderate, 7–9 = severe), using facial photodamage and repair as a surrogate for skin regeneration and repair. As these are real-world cases, some doctors preferred to follow a 7-day or 28-day post-procedure approach to evaluate the immediate impact of the formula.

Physicians also rated hydration as dry (25 arbitrary units (AU) or below), optimum (35–45 AU), or high level of hydration (55+ AU) based on stratum corneum hydration measurements. In addition, the physician rated overall appearance using the 5-point global aesthetic improvement scale (GAIS) (1=very much improved, 2=much improved, 3=improved,4=no change, 5= worse) at weeks 3 and 6 for the right and left sides of the face. Lastly, discomfort/

TABLE 1.

Physician Split-Face Assessment Template

	Dark Spots		PIE/ PIH		Skin Texture		Radiance		Fine Lines		Elasticity		Overall Appearance		Hydration		Discomfort/ Tolerability		Erythema		Dryness	
Patient ID: Age: FITZ: Gender (F/M): Skin Type: Procedure:	Modified Griffiths Scale 0–9 (10 point scale) 0= None (Best Possible Condition) 1–3=Mild 4–6=Moderate 7–9= Severe (Worst Possible Condition)												GAIS (5 point scale:1-5) 1=Very Much 2= Much Improved 3= Improved 4=No change 5=Worse		Range 0-65 Dry: 25 or below Optimum: 35-45 High level of hydration: 55+		Yes or No If Yes, explain		5 point Scale: (0-4) 0=None 1=Minimal 2=Mild 3=Moderate 4=Severe			
	Score (0-9) Right	Score (0-9) Left	Score (0-9) Right	Score (0-9) Left	Score (0-9) Right	Score (0-9) Left	Score (0-9) Right	Score (0-9) Left	Score (0-9) Right	Score (0-9) Left	Score (0-9) Right	Score (0-9) Left	Score (0-9) Right	Score (0-9) Left	Score (1-5) Left	Score (1-5) Right	Score (1-5) Left	Score (Yes or No) Right	Score (Yes or No) Left	Score (0-4) Right	Score (0-4) Left	Score (0-4) Right	Score (0-4) Left
Visit 1: Baseline/ Pre-Procedure*																						
Visit 1: Post-Procedure + Product Application																						
Visit 2: Week 3*																						
Visit 3: Week 6*																						

* Accompaning Full Front, Right, and Left, Visia Images

TABLE 2.

Subject Split-Face Assessment Template

	Questions	Visit 1 (Post-Procedure) Right	Visit 1 (Post-Procedure) Left	Visit 2 Right	Visit 2 Left	Visit 3 Right	Visit 3 Left
1	Product has a pleasant texture						
2	Skin looks healthier						
3	Skin looks younger						
4	Skin looks more supple						
5	Acne looks improved						
6	Dark Spots look reduced/minimized						
7	Hyperpigmentation looks reduced/minimized						
8	Skin looks brighter/more radiant/vibrant						
9	Skin tone looks more even						
10	Skin Texture looks smoother/more refined						
11	Skin looks less red						
12	Overall, appearance of skin is improved						
13	Overall, how satisfied are you with the product						

tolerability, erythema, and dryness were noted at each visit. Erythema and dryness were rated on a 5-point scale from (0=none to 4=severe) comparing the right and left sides of their faces.

Qualitative responses were also collected from patients at each follow-up visit in a self-assessment questionnaire. Patients were asked to rate 13 statements on a 5-point Likert scale (5=strongly agree, 4= agree, 3=neutral, 2=disagree, and 1=strongly disagree). Questions inquired about patient satisfaction with skin results and with the phyto PDRN serum. Examples of the physician assessment and subject assessment templates can be found in Tables 1 and 2, respectively.

REAL -WORLD CASES

Eight cases were selected by the expert panel to demonstrate the use of the phyto PDRN serum in an integrative skin treatment plan under real-world conditions. The cases presented are summarized in Table 3. All cases demonstrated successful integration of the phyto PDRN serum into the post-procedure care of eight women with FST varying from FST II to IV and ages from 28 to 68. Patients underwent non-ablative fractional laser, Nd:YAG, microneedling, microneedling radiofrequency, and chemical peels to address their various skin concerns, followed by split-face phyto PDRN serum application for up to 6 weeks. Results are detailed in the following case descriptions.

TABLE 3.

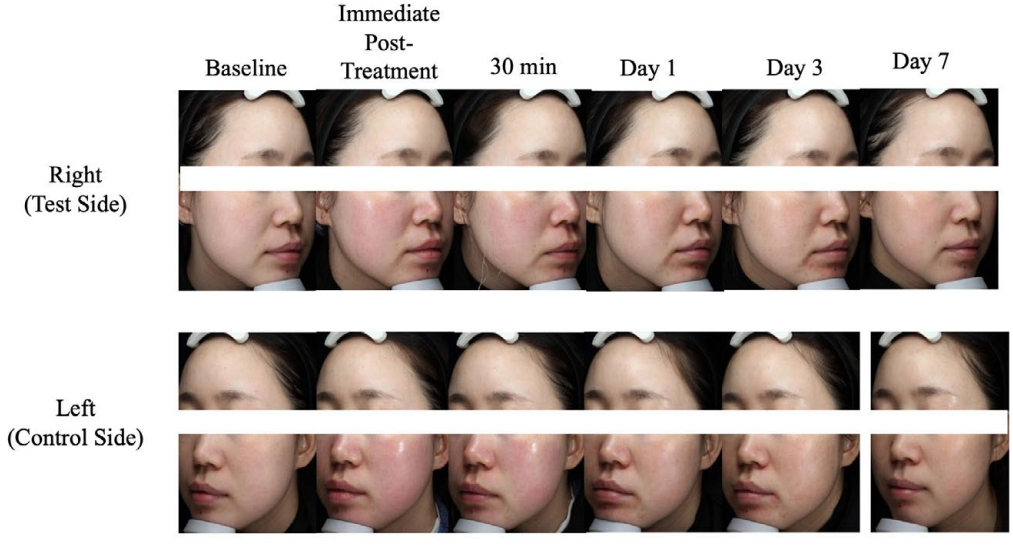
Summary of Patient Cases

Case	Patient Details	Procedure Combined With Phyto PDRN Serum
1	28F FST III	Non-ablative fractional laser
2	32F FST IV	Microneedling
3	35F FST II	20% Glycolic Acid Peel 15% TCA Spot Treatment
4	34F FST III	20% glycolic acid peel
5	38F FST IV	Nd:YAG (1064nm) laser and Jessner Chemical Peel
6	35F FST IV	Microneedling Radiofrequency
7	33F FST III	Non-Ablative Fractional Laser (Mosaic 3D)
8	68F FST III	50% TCA Chemical Peel

Case 1. Non-Ablative Fractional Laser

A 28-year-old woman with Fitzpatrick skin type (FST) III presents with concerns of large pore size. To address this, the clinician selected a non-ablative fractional laser (energy 31, density 250) for this patient. Immediately post-procedure, the clinician applied a facial mask

FIGURE 1. Case 1. 28F treated with Non-Ablative Fractional Laser and Post-Procedure Split Face Phyto PDRN Serum.



Photos Courtesy of Yan Wu MD

sheet imbibed with the phyto PDRN serum to the right side of the face and a saline-soaked mask sheet to the left side of the face. The next day, the patient began applying the phyto PDRN serum to the right side of her face, followed by her daily moisturizer to the full face. Immediately post-procedure, the right (treated) side of her face had less redness than her left (control) side (Figure 1). The patient was followed for 7 days. By day 7, there was a notable improvement in skin tone brightening compared to the standard moisturizer. Measuring trans-epidermal water loss (TEWL), the phyto PDRN also appeared to reduce TEWL and improve stratum corneum hydration better than the patient's standard moisturizing cream. The serum did not lead to any increased burning or stinging on the treated side and was well tolerated by the patient.

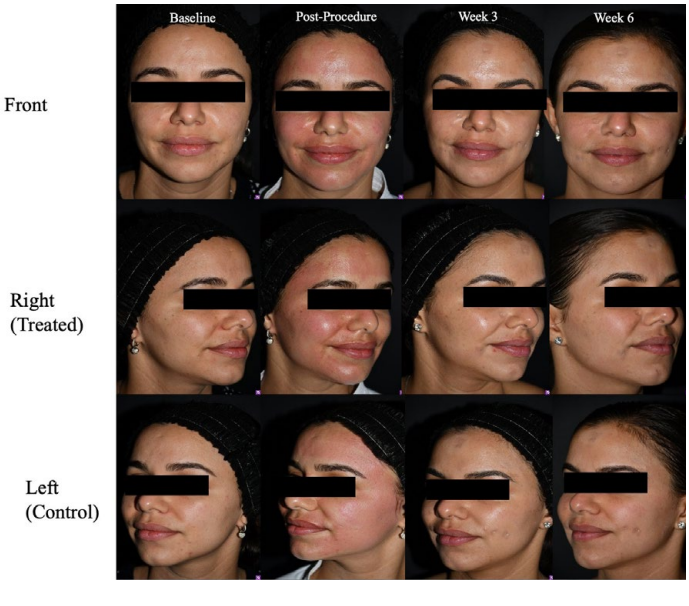
Case 2. Microneedling

A 32-year-old woman with FST IV presented for treatment of uneven skin tone, acne scarring, and post-inflammatory hyperpigmentation (PIH). On day 0, she underwent microneedling to address these concerns. At baseline, her dark spot scores were 6 on both the left (control) and right (treated) sides of the face. Skin texture scores were 5 and 5, PIE/PIH 0 and 0, radiance 4 and 4, fine lines 2 and 2, and elasticity 4 and 4, for the left and right sides, respectively. The patient also demonstrated very high baseline skin hydration. Immediately post-procedure, there was a worsening in several parameters, likely due to the expected effects of microneedling. Dark spot scores increased to 8 bilaterally, skin texture to 6 bilaterally, and radiance to 6 bilaterally. By week 3, improvement began to emerge. Dark spots decreased to a score of 5 on the treated (right) side, while the control (left) side showed no improvement with standard moisturizer alone. PIE/PIH decreased to 3 on the right side but increased to 6 on the left, reflecting residual post-procedure erythema. By week 6, erythema had largely resolved on both sides; however, PIH remained more prominent on the left side (score 7) compared to the right (score 2). The patient also demonstrated global improvements in skin elasticity, texture, and dyschromia. The physician rated overall improvement as 2 (much improved) for the right side and 3 (improved) for the left (Figure 2). The patient reported high satisfaction, noting that her skin appeared healthier and more youthful after 6 weeks. She also reported fewer acne breakouts, suggesting additional benefit. Overall, the greatest improvement was observed in post-procedure erythema, with the phyto PDRN serum contributing to faster recovery on the treated side compared to the control.

Case 3. Glycolic Acid Chemical Peel and TCA Spot Treatment

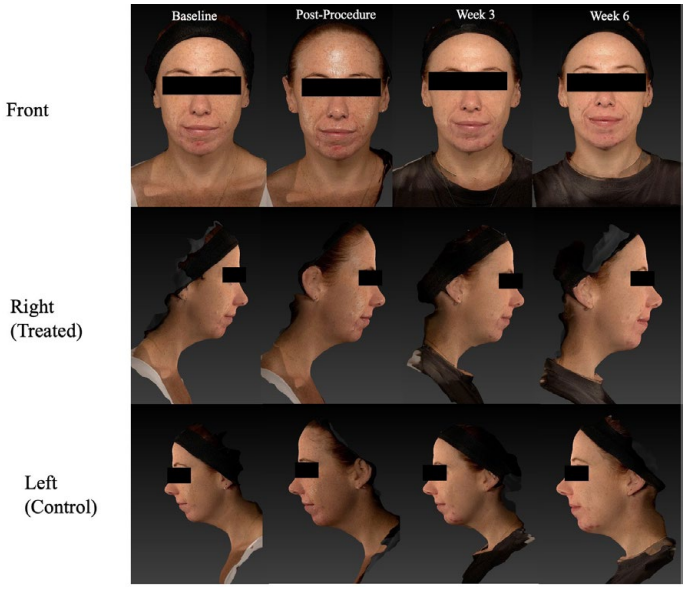
A 35-year-old woman with FST II presented with concerns of fine lines, wrinkles, and dyschromia. At baseline (pre-procedure), her scores for dark spots, PIE/PIH, skin texture, radiance, fine lines, and

FIGURE 2. Case 2. 32F treated with Microneedling and Post-Procedure Split-Face Phyto PDRN Serum.



Photos Courtesy of Jill Waibel MD

FIGURE 3. Case 3. 35F treated with 20% Glycolic Acid Chemical Peel followed by 15% Trichloroacetic acid spot treatment and Post-Procedure Split-Face Phyto PDRN Serum.



Photos Courtesy of John Sullivan MD

elasticity were as follows for the right (treated) and left (control) sides of the face, respectively: 5 and 5, 6 and 5, 5 and 4, 3 and 3, 4 and 3, and 4 and 3.To address these concerns, the clinician applied a BHA/AHA cleansing solution to the face, followed by a 20% glycolic acid peel and 15% trichloroacetic acid (TCA) spot treatment. Immediately post-procedure, phyto PDRN serum was applied to the right side of the face. Post-procedure application appeared to mildly reduce PIE on the treated side (score 5) compared to the control side (score 6). The patient continued applying the serum to the right side, and by week 3, there was a more notable reduction in PIE/PIH on the right (score 3) compared to the left (score 5). Skin texture also improved, with scores of 3 on the right and 4 on the left, compared to baseline scores of 5 and 4. Skin hydration remained stable throughout the study period; the patient had high baseline hydration and maintained these levels over time. The treatment was well tolerated, with no reported discomfort. By week 6, the clinician assessed the right side as much improved (GAIS score 2) compared to the left side (GAIS score 3) (Figure 3). The patient reported that the serum had a pleasant texture and imparted a supple appearance to the skin, with noticeable improvement in dark spots and overall skin tone.

Case 4. Glycolic Acid Peel

A 34-year-old woman with FST III underwent a 20% glycolic acid peel to address uneven skin tone and overall skin dullness. At baseline, the clinician noted no appreciable differences between the right and left sides of the face. The patient exhibited mild-to-moderate PIH, dyschromia, fine lines, and reduced elasticity, with scores ranging from 2 to 4 bilaterally. Immediately post-procedure, phyto PDRN serum was applied to the right side of the face. Scores remained largely unchanged except for increased erythema on the left (control) side (score 6) compared to the right (treated) side (score 3), suggesting a soothing effect of the phyto PDRN serum on post-procedure redness. By week 6, the patient demonstrated noticeable improvement across multiple parameters, including dark spots (right: 1, left: 2), PIE/PIH (score 1 bilaterally), and skin texture (right: 1, left: 2). The clinician assigned an overall improvement score of 3 (improved), with no significant difference between the right and left sides at the end of the 6-week treatment period (Figure 4). The patient strongly agreed that the product helped reduce facial redness and improve skin tone on the treated side. She also reported that the product enhanced overall skin quality and hydration, giving her skin a more luminous, youthful appearance.

Case 5. Nd:YAG (1064nm) laser and Jessner Chemical Peel

A 38-year-old woman with FST IV presented with concerns of skin dullness and aging. To address aging and dyschromia, she underwent short-pulsed Nd:YAG laser (8,000 pulses, 16J) treatment followed by a single coat of a Jessner chemical peel. At baseline (day 0), she had moderate scores (5) for both skin texture and radiance, with minimal immediate post-procedure change observed. The right side of the face, which received phyto PDRN serum immediately

FIGURE 4. Case 4. 34F treated with Glycolic Acid Chemical Peel and Post-Procedure Split-Face Phyto PDRN Serum.

Photos Courtesy Carlos Morales Raya MD

FIGURE 5. Case 5. 38F treated with Nd:YAG laser followed by Jessner peel and Post-Procedure Split-Face Phyto PDRN Serum.

Photos Courtesy Marco Rocha MD

post-procedure, was associated with less patient-reported burning compared to the left side. Erythema and dryness also appeared reduced on the treated side. By week 3, there was a decrease in post-inflammatory erythema and hyperpigmentation (PIE/PIH), with scores improving from baseline (right: 3 to 2; left: 4 to 3). Skin texture also improved (right: 3; left: 4) from a baseline score of 5 on both sides. Radiance showed greater improvement on the right side, with a 4-point improvement compared to a 2-point improvement on the left. By week 6, the clinician assessed the right side as "very much improved" (GAIS 1), while the left side was rated as "improved" (GAIS 3) (Figure 5). The patient reported that the product had a pleasant texture upon application and noted improvements in hyperpigmentation, skin vibrance, evenness, and redness. She expressed high satisfaction with the product after 6 weeks of use.

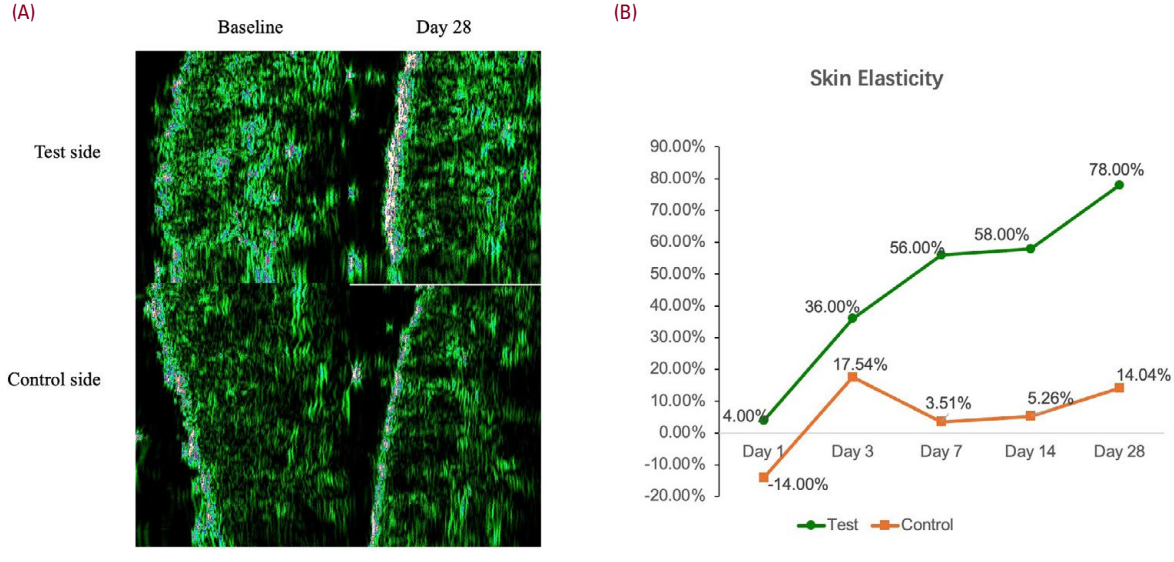
Case 6. Microneedling Fractional Radiofrequency (MFRF)

A 35-year-old woman with FST IV presented with concerns of skin laxity, sagging, and dullness. The clinician selected MFRF paired with the phyto PDRN serum to help boost collagen production and produce a facial lifting effect. The following MFRF settings were used: Mandibular: Monopolar, 2.0 mm, 200 ms, 12J; Midface: bipolar, 1.5 mm, 150 ms, 10J; periorbital: bipolar, 0.8 mm, 100 ms, 8J; forehead:

FIGURE 6. Case 6. 35F treated with Microneedling Radiofrequency and Post-Procedure Split-Face Phyto PDRN Serum.

Photos Courtesy of Xiaoning Li MD

FIGURE 7. Dermal Density and Skin Elasticity Measures for Case 6. (A) Increase in Dermal density seen at Day 28 post-procedure with Phyto PDRN serum application compared to control (B) Percentage increase from baseline in skin elasticity of Phyto PDRN (test/treated) side compared to control.

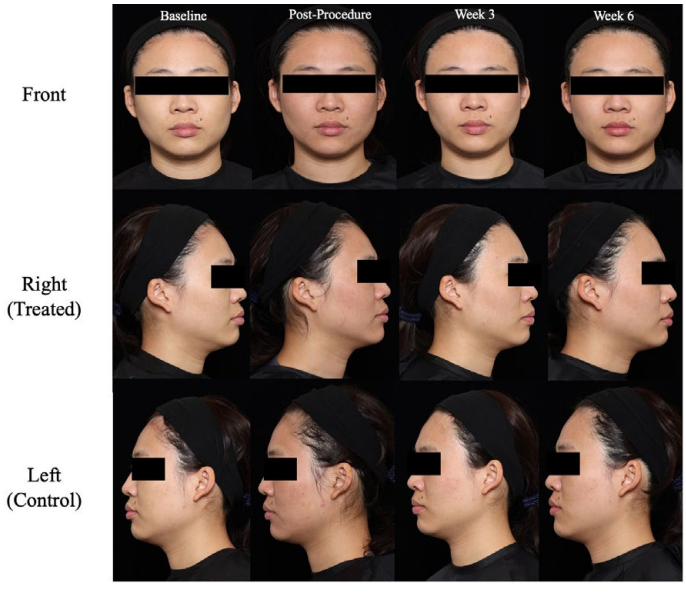


bipolar, 0.8 mm, 100 ms, 10 J. On day 0, the patient underwent MFRF, and a facial mask containing 2–4 drops of the phyto PDRN serum was applied to the right face compared with a standard face mask to the left side. The patient was found to have significant redness post-treatment and on day 1. However, by day 1, the phyto PDRN-treated side (right) appeared to have less redness than the control left side (Figure 6). The patient continued to apply the phyto PDRN serum daily to the right face, followed by twice daily application of moisturizer to the full face. The patient was followed for 28 days post-procedure and was found to have significant improvement in skin hydration. Effects of redness revealed that the phyto PDRN serum had immediate effects on post-procedure redness, which continued with prolonged use. Further, the phyto PDRN serum appeared to influence a reduction in melanin production to even out skin tone (Figure 6). Lastly, the phyto PDRN serum was shown to increase dermal thickness and density, resulting in a greater and more sustained improvement in skin elasticity (Figure 7).

Case 7. Non-Ablative Fractional Laser (Mosaic 3D)

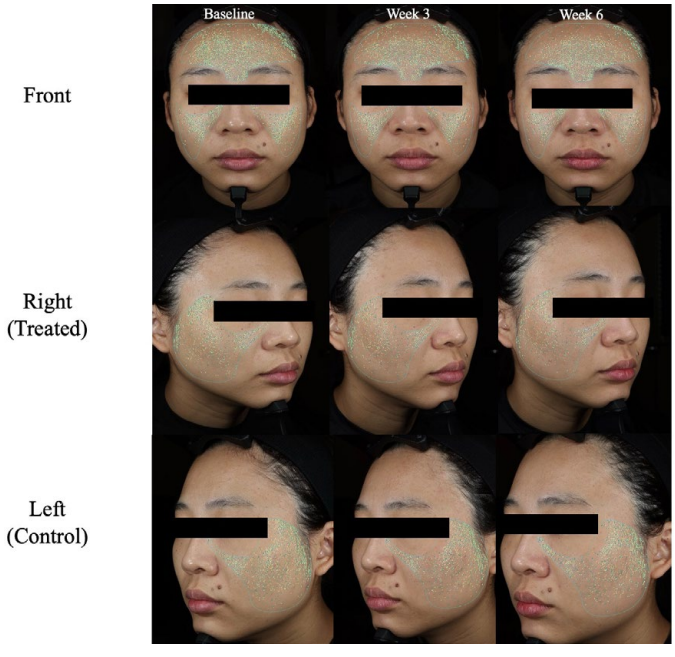
A 33-year-old woman with FST III presented with concerns of uneven skin texture and facial hyperpigmentation. The clinician elected to treat her with a Mosaic 3D non-ablative fractional laser at day 0, followed by application of phyto PDRN serum to the right side of the face and a standard daily moisturizer to the left side. At baseline, scores for the right and left sides of the face, respectively, were as follows: dark spots (2, 3), PIE/PIH (0, 0), skin texture (3, 4), radiance (1, 2), fine lines (1, 1), and elasticity (1, 3). Immediately post-procedure, scores increased, reflecting expected transient worsening: dark spots (5, 6), PIE/PIH (4, 7), skin texture (4, 6), radiance (3, 5), fine lines (2, 3), and elasticity (2, 4) for the right and left sides, respectively. The clinician assigned an overall Global Aesthetic Improvement Scale (GAIS) score of 5 ("worse") at this timepoint. By week 3, improvement was observed, particularly on the phyto PDRN-treated side. Dark spot scores improved to 2 (right) and 5 (left). Greater improvements were also noted on the treated side for PIE/PIH (right: 2, left: 4), skin texture (right: 3, left: 5), and radiance (right: 2, left: 4). At week 6, there was a slight increase in dark spot scores compared to week 3, measuring 3 (right) and 6 (left). Skin texture continued to improve, with scores of 2 (right) and 4 (left). Final scores at week 6 were as follows: PIE/PIH (3, 5), radiance (2, 3), fine lines (1, 1), and elasticity (1, 2) for the right and left sides, respectively. Overall, the clinician assigned a GAIS score of 4 ("no change") to the right side and 5 ("worse") to the left side at 6 weeks post-procedure (Figure 8). Objective analysis using Visia-CR imaging at baseline, week 3, and week 6 demonstrated significant improvement in skin texture (Figure 9). The treated side showed a substantially smaller residual texture area, indicating a greater reduction in surface irregularity. Visia-CR brown spot analysis also revealed a reduction in pigmented areas on the phyto PDRN–treated side, with worsening pigmentation on the untreated side.

FIGURE 8. Case 7. 33F Treated with Mosaic 3D Non-Ablative Fractional Laser and Post-Procedure Split-Face Phyto PDRN Serum.



Photos Courtesy of Liang-Chen Lin

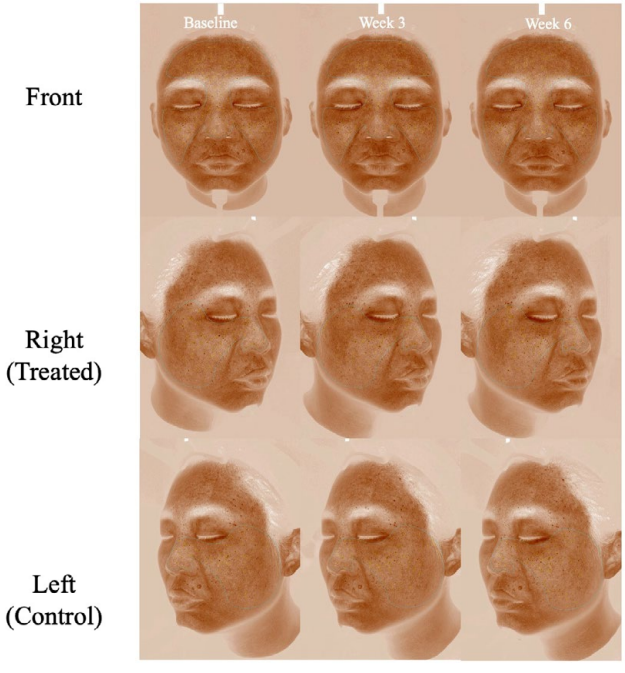
FIGURE 9. Improvement in Skin Texture measured with Visia-CR with use of Phyto PDRN Serum in Case 7.



Photos Courtesy of Liang-Chen Lin

Journal of Drugs in Dermatology
September 2026 • Volume 25 • Issue 9 (Supplement 1)

FIGURE 10. Improvement in brown spots measured with Visia-CR with use of Phyto PDRN Serum in Case 7.



Photos Courtesy of Liang-Chen Lin

Additionally, there was a marked decrease in brown spot lesion count on the treated side compared to the control, suggesting better suppression of new lesion formation (Figure 10). Overall, the patient reported being mostly satisfied with the product and agreed that the phyto PDRN serum improved the overall appearance and vibrance of her skin.

Case 8. Trichloroacetic Acid Chemical Peel

A 68-year-old woman, FST III, presented with concerns of uneven skin texture, dyspigmentation, and overall skin dullness. Baseline physician-assessed scores were as follows: dark spots 1 (right) and 1 (left); PIE/PIH 0 and 0; skin texture 7 and 7; radiance 6 and 6; fine lines 7 and 7; and elasticity 7 and 7 for the right and left face, respectively. The patient underwent a full-face 50% TCA chemical peel. Post-procedure, she was instructed to apply a daily phyto PDRN serum to the right face and a standard moisturizer to the left face. No immediate post-procedural changes in clinical scores were observed with product application.

Clinical improvement became evident at the week 3 follow-up. Physician-assessed scores were as follows: dark spots 0 and 0; PIE/PIH 0 and 0; skin texture 2 and 3; radiance 3 and 4; fine lines 5 and 6; and elasticity 5 and 6 for the right and left face, respectively. At week 6, the GAIS was rated as 2 (much improved) for the right face and 3 (improved) for the left face (Figure 11). The patient tolerated the phyto PDRN serum well, with no reported irritation or discomfort. Patient-

FIGURE 11. Case 8. 68F treated with 50% trichloroacetic acid (TCA) chemical peel and Post-Procedure Split-Face Phyto PDRN Serum.

Photos Courtesy of Elaine Fung MD

reported outcomes indicated perceived improvement in hydration, smoother skin texture, and a more refined overall appearance. She expressed satisfaction with her results and the adjunctive use of the phyto PDRN serum.

DISCUSSION

The presented real-world cases demonstrate the integrated use of phyto PDRN serum following a range of cosmetic procedures and clinical indications (Table 3). Treatments included laser-based procedures, chemical peels, and microneedling with or without radiofrequency performed for concerns such as acne, acne scarring, dyschromia, uneven texture, photodamage, redness, reduced skin quality and visible facial aging. Although these indications and procedures differ, they involve controlled epidermal and/or dermal injury, transient inflammation, erythema, edema, barrier disruption, and subsequent need for epithelial recovery and dermal remodeling. This shared recovery biology provides the rationale for evaluating phyto PDRN serum as an adjunctive treatment designed to support post-procedure recovery and improve patient comfort across diverse aesthetic indications.

The formulation combines the phyto corrective botanical ingredients and novel hydrating agents with PDRN extracts as an adjunctive treatment designed to support post-procedure recovery and create a favorable environment for skin repair and skin-quality improvement. The phyto corrective component contains botanical and fruit-derived extracts with antioxidant and anti-inflammatory properties to help address post-procedure erythema, edema, and barrier disruption.

PDRN provides additional regenerative support post-procedure including repair, recovery and remodeling. Together, these complementary mechanisms help improve recovery, comfort, skin texture and overall treatment outcomes. Evidence from wound medicine, orthopedics, and dermatologic surgery supports the pro-repair and anti-inflammatory effects of PDRN. In chronic diabetic foot ulcers, PDRN has been associated with faster wound closure. In tendinopathies, PDRN treatment has been reported to reduce pain and improve function.[6,7] Kim et al also demonstrate in a randomized controlled trial that PDRN injection may also help reduce scar erythema and hypertrophic scar formation.[8] PDRN effects on wound healing appear to be more rapid, averaging 30 days for complete healing compared to its effect on skin regeneration.[6]

In vitro studies have shown that PDRN can reduceTNF-α levels while increasing expression of transforming growth factor-beta (TGF-β) and VEGF expression, modulating inflammation and supporting angiogenesis and wound repair.[9] In our real-world split-face studies, the primary aim was to evaluate the integrated use of phyto PDRN serum as an adjunctive recovery treatment after aesthetic procedures. Within the 6-week follow-up period, the phyto PDRN serum treated side recovered faster, with reduced erythema and post-procedure downtime. Patients also reported less burning and redness on the treated side.

PDRN (and PN-based) injections have also been increasingly used as bio-remodeling treatments for skin rejuvenation. In a randomized, split-face clinical trial, a purified polynucleotide injectable, was shown to lead to higher GAIS scores at week 16 with a greater reduction in skin roughness by week 28 in 27 treated patients.[10] These findings suggest that while PDRN-based therapies through A2A receptor-mediated signaling including the stimulation of fibroblast activity and matrix remodeling may support longer-term improvements in skin quality, texture and dermal remodeling, these effects evolve over several months and are likely distinct from the more rapid effects observed in wound healing and post-procedure recovery.[11,12]

In our study, improvements in wrinkles, global skin quality and texture were less consistently apparent after topical administration by week 6, which may reflect the longer time course required for collagen remodeling and boosting plus broader skin-quality changes.

The phyto PDRN serum was also found to be safe and well-tolerated among the treated patients. No patients reported stinging or discomfort with post-procedure application, and no post-procedure infections or skin reactions were observed with the treatment regimen. Patients reported favorable product acceptability, including satisfaction with the feel on the skin and perceived improvements in radiance and texture. These findings support its use as a well-tolerated adjunctive recovery serum after aesthetic procedures with mild barrier disruption. Future studies should evaluate longer-term maintenance use. The panel agreed that pre-procedure use may also be worth investigating, as barrier optimization and reduction of baseline inflammation could theoretically further improve treatment tolerance and reduce post-procedure erythema and dyschromia.

Across the eight presented cases, the phyto PDRN serum was used as an adjunct following a range of aesthetic procedures and clinical indications, providing a real-world assessment of its role in post-procedure recovery. The treated hemiface demonstrated faster visible recovery, reduced erythema and improved patient-reported comfort, while favorable product acceptability supported adherence in the early recovery period. These findings support its role as a practical and well-tolerated post-procedure recovery serum, where hydration, barrier support, inflammation modulation, and repair signaling are clinically relevant. However, because follow-up was limited to 6 weeks and the formulation contains multiple active components, longer-term controlled studies are needed to define its effect on texture, dyschromia, dermal remodeling, and maintenance skin quality as well as its potential role in pre-procedure skin priming.

Limitations

This real-world case series presents the use of a phyto PDRN serum under routine post-procedural conditions in patients undergoing cosmetic treatments, with the aim of optimizing aesthetic outcomes. The data were collected in a real-world setting and reflect subjective physician assessments and patient-reported outcomes, rather than findings from a controlled clinical trial. The split-face design was intended to help patients and clinicians better isolate the potential additive benefit of the phyto PDRN serum compared with standard post-procedure care alone. However, there was no formal verification system in place to confirm daily application adherence or ensure exclusive use of the serum on the designated right (treatment) hemiface. In addition, the arbitrary assignment of the treatment hemiface may have introduced baseline asymmetry bias, as hemifacial differences in photodamage, aging, and skin quality are common and the two sides of the face are not always clinically equivalent. Lastly, all the patients presented were mostly younger women with FST II–IV, offering little insight for darker phototypes and the male population. Overall, these cases provide experiential clinical insights and expert observations regarding the integration of a soothing, collagen-supportive serum into post-procedural skincare regimens, offering practical considerations for real-world use.

CONCLUSION

The phyto PDRN serum combines botanical antioxidant and anti-inflammatory ingredients with PDRN polymers in a formulation designed to support post-procedure recovery and skin repair. PDRN is known for its wound-healing, collagen-stimulating, and overall skin-rejuvenating properties, making it a valuable component in aesthetic treatments and post-procedure care. In these real-world split-face cases, the serum was found to be a safe, well-tolerated and clinically useful as an adjunct to integrative skin care regimens following cosmetic procedures, including non-ablative laser treatments, microneedling, microneedling radiofrequency, and chemical peels. Treated areas showed faster visible recovery, reduced erythema and improved patient-reported comfort with favorable product acceptability and perceived improvements in radiance and skin texture. These findings support the role of phyto PDRN serum as a practical post-procedure recovery adjunct while longer-term controlled studies are needed to evaluate its sustained effects on skin quality, texture, dyschromia, and dermal remodeling.

DISCLOSURES

The real-world case series was supported by an unrestricted educational grant from SkinCeuticals. All authors contributed to the cases and development of the manuscript, reviewed it, and agreed with its content.

Patricia Brieva PhD is an employee of SkinCeuticals. The remaining authors do not disclose any additional conflicts of interest.

ACKNOWLEDGMENT

We thank Anneke Andriessen PhD for her help in preparing this manuscript. Stephen Lynch, PhD, Stacy White, PhD, and Nikola Barlokova for their support on the advisory board.

REFERENCES

1. Varani J, et al. Decreased collagen production in chronologically aged skin: roles of age-dependent alteration in fibroblast function and defective mechanical stimulation. *Am J Pathol.* 2006;168(6):1861-1868.

2. Dakhovnik A, et al. A collagen amino acid composition supplementation reduces biological age in humans and increases health and lifespan in vivo. *NPJ Aging.* 2025;11(1):91.

3. Marques C, et al. From polydeoxyribonucleotides (PDRNs) to polynucleotides (PNs): bridging the gap between scientific definitions, molecular insights, and clinical applications of multifunctional biomolecules. *Biomolecules.* 2025;15(1).

4. Colangelo MT, Galli C, Guizzardi S. The effects of polydeoxyribonucleotide on wound healing and tissue regeneration: a systematic review of the literature. *Regen Med.* 2020; 15(6): 1801-1821.

5. Gold M, et al. Real-world patient cases using botanical serum-containing corrective gel as an adjunct to aesthetic facial laser or microneedling radiofrequency (MRF) treatment. *J Drugs Dermatol.* 2024;23(3):SF400676s3-SF400676s14.

6. Squadrito F, et al. The effect of PDRN, an adenosine receptor A2A agonist, on the healing of chronic diabetic foot ulcers: results of a clinical trial. *J Clin Endocrinol Metab.* 2014;99(5):E746-E753.

7. Yoon YC, et al. Polydeoxyribonucleotide injection in the treatment of chronic supraspinatus tendinopathy: a case-controlled, retrospective, comparative study with 6-month follow-up. *Arch Phys Med Rehabil.* 2017;98(5):874-880.

8. Kim BR, et al. Early postoperative injections of polydeoxyribonucleotide prevent hypertrophic scarring after thyroidectomy: a randomized controlled trial. *Adv Wound Care (New Rochelle).* 2023;12(7):361-370.

9. Park JM, et al. Effects of Chlorella protothecoides-derived polydeoxyribonucleotides on skin regeneration and wound healing. *Arch Dermatol Res.* 2025;317(1):483.

10. Lee YJ, et al. Comparison of the effects of polynucleotide and hyaluronic acid fillers on periocular rejuvenation: a randomized, double-blind, split-face trial. *J Dermatolog Treat.* 2022;33(1):254-260.

11. Kim JH, et al. Effects of polynucleotide dermal filler in the correction of crow's feet using an Antera three-dimensional camera. *Aesthetic Plast Surg.* 2022;46(4):1902-1909.

12. Veronesi F, et al. Polydeoxyribonucleotides (PDRNs) from skin to musculoskeletal tissue regeneration via adenosine A(2A) receptor involvement. *J Cell Physiol.* 2017;232(9):2299-2307.

AUTHOR CORRESPONDENCE

Sophie Guénin MD MSc
E-mail:..... Sophiehelene.guenin@gmail.com

JOURNAL OF DRUGS IN DERMATOLOGY
JDD
DRUGS • DEVICES • METHODS