



**MESO-THERAPY
CERTIFICATION
TRAINING
PROGRAM**

STANDARDS FOR MESO-THERAPY CERTIFICATION TRAINING PROGRAM

1. NAME OF TRAINING

Mesotherapy Certification Training Program

2. AIM OF TRAINING

This certification training program aims at gaining the physicians and dentists (only in their own fields) who will practice mesotherapy the required qualifications so as to ensure that these practices are conducted in the most efficient and productive way.

3. LEGAL BASIS FOR TRAINING

The following legislation is taken as a basis for the implementation of this training program.

1. Decree Law No. 663,
2. "Regulation on Certification Training of the Ministry of Health" published in the Official Gazette dated February 4, 2014 and numbered 28903,
3. "Regulation on Traditional and Complementary Medicine Practices" published in the Official Gazette dated October 27, 2014 and numbered 29158.

4. DEFINITIONS

Mesotherapy: It is a practice method which ensures that mesoderm-related organ pathologies are cured by injecting the herbal and pharmacological drugs.

Practice Center: It is a center which is established within the body of health application and research center of the faculties of dentistry or the faculties of medicine and training and research hospitals to perform the practices specified in the relevant Regulation under the responsibility of a physician or a dentist who holds a certificate on the relevant field and which can provide training if authorized by the Ministry.

Distance Learning: It is a way of learning in which students are separated by time and physical location from instructors and both the transfer of course contents and the interaction are ensured using information and communication technologies.

Asynchronous Learning: It is a way of learning-training which occurs asynchronously at different times and locations.

Synchronous Learning: It is a way of learning-training which occurs synchronously.

5. PROCEDURES AND PRINCIPLES TO IMPLEMENT THIS TRAINING PROGRAM

The training program shall be implemented based on the procedures and principles listed below:

1. The training program shall be carried out both in theory and in practice. The theoretical part of the

training may be taught in face-to-face classes and/or a maximum of 80% of the same theoretical part may be taught as distance learning courses.

2. It shall be ensured, in distance learning, that the participants have synchronous and asynchronous access to interactive practices on-line through the infrastructure provided by the server.
3. The participants need to conduct at least 10 (ten) mesotherapy practices during the training.
4. The contents of the courses shall be designated in the beginning of the training program; the participants shall be given references or provided with lecture notes.
5. Theoretical and practical courses shall last for 8 (eight) hours a day at most. The period of a course shall be 45 (forty five) minutes.
6. A maximum of 50 (fifty) participants for distance learning courses and a maximum of 30 (thirty) participants for face-to-face classes can be accepted in one training period/term except for 2 (two) participants who will be assigned by the Ministry.
7. The participants to be assigned by the Ministry will be a physician or a dentist who does not have any public service liability and whose training in this program is of importance for his/her services in the institution she/he works. These participants will not pay any training fee. The participants cannot be made work in any other field/unit/center or in any other job position during the training program.
8. Continuous attendance is essential for the training, and the prac-

tical training requires compulsory attendance. The participants who cannot attend 10% (ten percent) of the practical training at most due to a legal excuse shall not be allowed to take the certification exam unless they complete the hours they miss. A maximum of 10% (ten percent) absence due to a legal excuse is acceptable for the theoretical training due to a legal excuse.

9. The following teaching and learning strategies, methods and techniques shall be applied in the training program:
 - Verbal lecture
 - Small group discussion
 - Demonstrative teaching
 - Participatory scientific activity
 - Question & Answer
 - Video-based teaching
 - Clinical Practice (Case study)
10. The practical training includes bed-side mesotherapy practices performed individually or in small groups in practice centers or units, and it consists of “observing”, “doing under supervision” and “doing independently” stages respectively.

6. PARTICIPANTS AND THEIR QUALIFICATIONS

Physicians and dentists (for dentists, only in their own field) can participate in this training program.

7. TRAINING CURRICULUM

7.1. Learning Objectives and Subjects in Training Courses

Subjects to be included in training program and learning objectives as well as duration of each subject are illustrated in Table 1 and Table 2.

Table 1A: Subjects to be Included in Theoretical Training Program for Physicians and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
MODULE - 1 Introduction to Mesotherapy		4
1. History of Mesotherapy a. 1952 Michel Pistor	briefly explains the history and development process of mesotherapy.	
b. 1958 Michel Bicheron	names the development	
2. Development of mesotherapy in Turkey and in the world	phases of mesotherapy in Turkey and in the world.	
3. Definitions of mesotherapy	defines mesotherapy.	
4. Theories clarifying the effect mechanism	explains the principles and contents of mesotherapy.	
a. Dr. Pistor’s “Reflex Theory” or “Tegument Stimulo-Therapy”	names the effect mechanisms of mesotherapy.	
b. Dr. Bicheron’s “Microcirculation Hypothesis”	describes pathophysiologic factors explaining the theory.	
c. Dr. Dalloz-Bourguignon’s “Three Units Theory or Mesoderm Theory”	describes the evidence-based theoretical principles.	
d. Dr. Ballesteros’s “Energetic Mesotherapy Theory”		
e. Dr. Mrejen’s “Systematized Spot Mesotherapy Theory”		
f. Dr. Multedo’s “Third Circulation Theory”		
g. Dr. Kaplan’s “Unified Theory”		
h. Transdermal Mesotherapy “Electroporation”		
i. Slow Mesotherapy “Mesoperfusion”		

Table 1A: Subjects to be Included in Theoretical Training Program for Physicians and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
MODULE - 2 Physiology and Embryology		2
1. Skin Anatomy and Physiology 2. Why Dermal Layer? 3. Embryology of Mesoderm 4. Advantages of Using Mesotherapy 5. Mesotherapy-Complementary Medicine Relationship	<ul style="list-style-type: none"> • describes the primary subjects of skin anatomy and physiology, which is a practice field of mesotherapy. • explains the importance of dermal layer of skin. • clarifies the underlying reasons of needling the dermal layer. • names the function, physiology and effect mechanism of dermal layer. • explains the meaning and importance of embryology of mesoderm. • explains the relationship between the mesotherapy and mesoderm-related tissues. • names the advantages of using mesotherapy. • describes the difference between mesotherapy and the other injection systems. • explains the reason why mesotherapy is a complementary practice for modern medicine practices. 	
MODULE -3 Materials Used in Mesotherapy		2
1. Manual Practice Methods 2. Mesotherapy Needles 3. Injectors 4. Ancillary equipment 5. Pressurized Needle-Free Injector Device 6. Transdermal Mesotherapy Device 7. Mesoperfusion	<ul style="list-style-type: none"> • names the materials used in mesotherapy. • describes the needles and their features. • describes the ways of using injectors. • explains the objectives and techniques of using ancillary equipment and pressurized injectors. • names transdermal practice mechanism and its practice fields. • defines mesoperfusion. • describes mesoperfusion practice method and prescription procedures. 	

Table 1A: Subjects to be Included in Theoretical Training Program for Physicians and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
MODULE - 4 Mesotherapy Practice Techniques		6
<ol style="list-style-type: none"> 1. Practice Techniques <ol style="list-style-type: none"> a. Intra-Dermis Technique b. Nappage Technique c. Point Injection Technique d. Epidermo-Dermis Injection Technique e. Papule Technique 2. Points to consider in practice 3. Factors affecting the success in mesotherapy 	<ul style="list-style-type: none"> • names the practice techniques used in mesotherapy. • describes the theoretical principles of practice techniques, and the practice methods. • describes the effects, intended purpose and advantages of practice techniques. • names the methods and principles to be considered in practice. • names the factors affecting the success in mesotherapy • describes the practice algorithms. • describes the qualities and quantities of the mixtures to be prepared. • describes the compliance, adverse effects and effect profiles of the mixtures. 	
MODULE - 5 Mesotherapy and Pharmacology		10
<ol style="list-style-type: none"> 1. Criteria for the Products to be Selected 2. Points to Consider in Preparing the Mixture 3. Drugs Used in Mesotherapy <ol style="list-style-type: none"> a. Pharmacological Effects b. Doses and Intended Use 4. Pharmacology of Skin and Subcutaneous Tissue 	<ul style="list-style-type: none"> • names the products to be used in mesotherapy. • describes the compliance of and pharmacological criteria for the products. • describes the effect mechanism of the products and the cases in which they are ineffective. • describes the successful product selection criteria. 	

Table 1A: Subjects to be Included in Theoretical Training Program for Physicians and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
MODULE - 4 Mesotherapy Practice Techniques		6
<p>5. Drugs having Dermal-Epidermal Effects</p> <p>a. Drugs having Effects at Cellular Level</p> <p>a.1. Hormones: Estradiol, Melatonin</p> <p>a.2. Antiandrogens: Progesterone, Estrogen, Flutamide, Finasteride</p> <p>a.3. Retinoic Acid</p> <p>b. At Interstitial Level</p> <p>b.1. Glycolic Acid, Oligoelement (CU, Zn, S), Vitamin C, Monomethylsilanetriol, Prothochondroitin Sulfate A, Glycosaminoglycan Sodium Pyruvate, Hyaluronic Acid, Lactate Amino</p> <p>c. Drugs having Hypodermic Effect</p> <p>c.1. Lipolytic Drugs: Xanthines (Aminophylline, Theophylline), Caffeine, Thyroid Hormones (Triac, L-Thyroxine), Salicylate Monomethylsilanetriol, Vasodilator Beta Agonist (Isoproterenol), Vasodilator Alpha-Antagonist (Yohimbine, Phentolamine), Amino Acids (L-Carnitine)</p>	<ul style="list-style-type: none"> • describes the mixture principles. • names the mixture preparation criteria in accordance with the usage indications. • describes the pharmacological effects of drugs to be used. • describes the doses and intended use of drugs. • describes the pharmacology of skin and subcutaneous tissue. • names the pharmacological effects of products that might be effective at dermal-epidermal level. • describes the effect mechanisms, their intended use and results. • describes the effect mechanism of the products used at hypodermic level. • describes the effect mechanisms and results of lipolytic drugs. • describes the intended use of drugs having trophic effects. • names the effect mechanisms of drugs having trophic effects. • describes the pharmacological compliance and doses of the drugs having trophic effects as well as their interaction with other drugs. • describes the intended use of drugs affecting vessels and circulatory system. • names the effect mechanisms of these drugs. • describes the pharmacological compliance and effects of these drugs. 	

Table 1A: Subjects to be Included in Theoretical Training Program for Physicians and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
<p>1. Criteria for the Products to be Selected</p> <p>2. Points to Consider in Preparing the Mixture</p> <p>3. Drugs Used in Mesotherapy</p> <p>a. Pharmacological Effects</p> <p>b. Doses and Intended Use</p> <p>4. Pharmacology of Skin and Subcutaneous Tissue</p> <p>5. Drugs having Dermal-Epidermal Effects</p> <p>a. Drugs having Effects at Cellular Level</p> <p>a.1. Hormones: Estradiol, Melatonin</p> <p>a.2. Antiandrogens: Progsterone, Estrogen, Flutamide, Finasteride</p> <p>a.3. Retinoic Acid</p> <p>b. At Interstitial Level</p> <p>b.1. Glycolic Acid, Oligoelement (CU, Zn, S), Vitamin C, Monometilsilantriol, Proteochondroitin Sulfate A, Glycosaminoglycan Sodium Pyruvate, Hyaluronic Acid, Lactate Amino</p> <p>c. Drugs having Hypodermic Effect</p> <p>c.1. Lipolytic Drugs: Xanthines (Aminophylline, Theophylline), Caffeine, Thyroid Hormones (Triac, L-Thyroxine), Salicylate Monometilsilantriol, Vasodilator Beta Agonist (Isoproterenol), Vasodilator Alpha-Antagonist (Yohimbine, Phentolamine), Amino Acids (L-Carnitine)</p>	<ul style="list-style-type: none"> • names the products to be used in mesotherapy. • describes the compliance of and pharmacological criteria for the products. • describes the effect mechanism of the products and the cases in which they are ineffective. • describes the successful product selection criteria. • describes the mixture principles. • names the mixture preparation criteria in accordance with the usage indications. • describes the pharmacological effects of drugs to be used. • describes the doses and intended use of drugs. • describes the pharmacology of skin and subcutaneous tissue. • names the pharmacological effects of products that might be effective at dermal-epidermal level. • describes the effect mechanisms, their intended use and results. • describes the effect mechanism of the products used at hypodermic level. • describes the effect mechanisms and results of lipolytic drugs. • describes the intended use of drugs having trophic effect 	

Table 1A: Subjects to be Included in Theoretical Training Program for Physicians and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
6. Drugs having Trophic Metabolic Effects	describes the pharmacological compliance and doses of the drugs having trophic effects as well as their interaction with other drugs.	
a. Salicilato de Monometilsilanotriol b. Asiaticosid c. Mesoglycan		
7. Vasoactive Drugs	describes the intended use of drugs affecting vessels and circulatory system.	
a. At Arterioller Level, At Capillary Level b. At Venular Level, At Precapillary Sphincter Level		
c. At Lymphatic Level, At Interstitial Level		
8. Enzymes	names the effect mechanisms of these drugs.	
a. Mucopolysaceharidase b. Hyaluronidase		
9. Analgesic and Non Steroid Anti-Inflammatory Drugs	describes the pharmacological compliance and effects of these drugs.	
a. Diclofenac, Ketoprofen		
b. Piroxicam, Tenoxicam c. Neurotrophin, Ketorolac		
10. Local Anesthetic Drugs	describes the drugs used as enzymes and their intended use.	
a. Procaine, Lidocaine, Mesocaine		
11. Myorelaxant Drugs	describes the underlying reasons of utilizing drugs that are used as enzymes.	
a. Thiocolchicoside		
b. Diazepam		
12. Hormones	names the effect mechanisms of drugs used in mesotherapy.	
a. Calcitonin		
b. Progsterone		
c. Estrogen	describes the compliance, tissue effects and pharmacology of the drugs used in mesotherapy.	
13. Vaccines		
14. Antibiotics		

Table 1A: Subjects to be Included in Theoretical Training Program for Physicians and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
MODULE - 6 Secondary or Iatrogenic Effects of Mesotherapy		2
1. Needle-Related Effects	describes mesotherapy-related adverse effects.	
2. Needle-Related Effects: Non-compliance, Allergic Reactions, Pain, Flash, Erythema, Epigastralgia	names the secondary effects related to drugs used in mesotherapy.	
3. Technique-Related Effects: Pain, Hematoma, Scratching	explains the reasons of these effects.	
4. Contraindications	describes the mesotherapy-related adverse effects. describes the measures to be taken, actions to be taken, and contraindicated conditions.	
MODULE - 7 Practice Fields of Mesotherapy		66
1. Mesotherapy in Acute and Chronic Pain Control	describes the usage indications of each practice field.	
a. Genuiculate Neuralgia	describes the conditions of use of each practice field.	
b. Trigeminal Neuralgia	describes the methods of use of each practice field.	
c. Arnold Nerve Neuralgia	describes the session numbers and session durations of each practice field.	
d. Cervico-Brachial Neuralgia	describes the effect mechanisms of each practice field.	
2. Fibrosis (Connective) Tissue Pathologies	describes the actions to be taken when the practice is ineffective.	
a. Tendinopathies, Dupuytren, Bursitises, Myositides, Hydrolipodystrophy (Cellulite)	describes its practice together with the other treatment methods.	
3. Sports Medicine and Mesotherapy	names the factors leading to success in practice.	
a. Tendon Injuries (Tendinopathy)		
b. Muscular Injuries (Muscle Contusion, Muscle Pain, Muscle Strain, Partial Tear)		
c. Ligament Injuries (Ligament Strain, Joint Sprains, Partial Tear)		

Table 1A: Subjects to be Included in Theoretical Training Program for Physicians and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
d. Bone Injuries (Periostitis, Stress Fractures)		
e. Cartilage Lesions		
f. Tissue Lesions Around the Joint (Bursitis, Capsulitis, Synovial Cyst)		
4. Rheumatismal Diseases and Mesotherapy		
a. Arthrosis in Each Region		
b. Arthritides		
c. Rheumatoid Polyarthritis		
d. Acute Rheumatisms		
5. Bone, Cartilage and Muscle Pathologies		
a. Periostitis		
b. Fracture Healing		
c. Internal Organ Muscle Spasms		
6. Adipose Tissue Pathologies		
a. Obesity		
b. Regional Overweight		
c. Lipoma		
7. Hematopoietic System Pathologies		
8. Lymphatic Tissue Pathologies		
9. Urogenital System Pathologies		
a. Impotence		
b. Enuresis		
c. Urinary Infection		
10. Vascular System Pathologies		
a. Veno-Lymphatic Pathway Edemas, Micro-circulation Problems		
11. Neurology and Mesotherapy		
a. Headaches: Tension, Vascular, Reflective		
b. Distony		
12. Vascular Pathologies and Mesotherapy		

Table 1A: Subjects to be Included in Theoretical Training Program for Physicians and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
<ul style="list-style-type: none"> a. Circulatory Failure in Lower Extremities b. Varicosis c. Edema, Lymphedema 		
<p>13. Aesthetic Medicine and Mesotherapy</p> <ul style="list-style-type: none"> a. Wrinkle b. Telangiectasis c. Skin Blemishes d. Stria 		
<p>14. Mesotherapy in Infection Pathologies</p> <ul style="list-style-type: none"> a. Rhinopharyngitis b. Sinusitis c. Respiratory Diseases d. Urologic and Gynecologic Diseases 		
<p>15. Geriatrics and Mesotherapy</p> <ul style="list-style-type: none"> a. Presbyopia b. Arthrosis 		
<p>16. Gynecology and Mesotherapy</p> <ul style="list-style-type: none"> a. Dysmenorrhea b. Chronic Salpingitis c. Menopause 		
<p>17. Gastroenterology and Mesotherapy</p> <ul style="list-style-type: none"> a. Dysphagia b. Reflux c. Gastroduodenal Ulcer d. Gastritis e. Constipation 		
<p>18. Dermatology and Mesotherapy</p> <ul style="list-style-type: none"> a. Acne b. Alopecia c. Scars d. Zoster e. Xanthelasma 		
<p>19. Immune System Pathologies and Mesotherapy</p>		

Table 1A: Subjects to be Included in Theoretical Training Program for Physicians and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
MODULE - 8 First Aid and Emergency Action		4
1. Basic Life Support (in Children and Adults) Principles	describes the basic life support rules and principles required in emergencies.	
2. First Aid in Hemorrhage	explains how to do first aid on a bleeding patient.	
3. First Aid in Consciousness Disorders	describes actions to be taken in consciousness disorders.	
4. First Aid in Injuries	describes actions to be taken in injuries.	
5. What are the First Aid Practices to be conducted in Shock Cases	describes actions to be taken in shock cases.	
6. How to Do First Aid in lowering the Blood Sugar Level?	describes hypoglycemia, its reasons and first aid actions to be taken in hypoglycemia cases.	
7. Transport Techniques of Patients/ Injured People	describes transport techniques of the patient and injured people.	
8. What is Chain of Survival?	describes emergency interventions required in the relevant cases.	
9. What is the ABC's of survival?		
10. Emergency Intervention in Allergic Reactions		
11. What are the Systems Comprising the Body that the First-Aider should know?		
12. What are the Important Indications related to Vital Signs?		
13. Evaluation of Consciousness and Vital Functions		
14. Evaluation of Airway, Breathing and Circulation		
TOTAL		96

Table 1B: Practice Training Subjects and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES	DURATION (Hours)
	Participant successfully completing this program:	
1. Asepsis-Antisepsis	names the practice fields of asepsis-antisepsis.	2
2. Preparation of Patient, Anamnesis, Physical Examination	describes the preparation of patient. describes anamnesis of patient. describes physical examination actions.	2
3. Diagnosis and Treatment Principles	names diagnosis and treatment principles.	2
4. Mesotherapy Injection Protocols and Practice	describes injection protocols and practice principles.	2
5. Aesthetic Indication Practices	names aesthetic indication practices.	2
6. Approaches Towards Patients with Pain and Practice	describes approaches towards patients with pain and practice techniques.	2
7. Session Intervals, Numbers, Dosage and Practice Techniques	realizes session intervals, numbers, dosage and practice techniques.	2
8. Manual Practice Methods	describes manual practice methods.	2
9. Mesotherapy Needles and Injector Use	describes mesotherapy needles and injector use.	2
10. Ancillary Equipment and Practice	describes ancillary equipment and practices.	2
11. Pressurized Needle-Free Injector Devices	describes pressurized needle-free injector devices	2
12. Transdermal Mesotherapy Practice Principles	describes transdermal mesotherapy practice principles.	2
13. Mesoperfusion Practice	describes mesoperfusion practice.	2
14. Practice Techniques (Intra-Dermis Technique, Nappage Technique, Point Injection Technique, Epidermo-Dermis Injection Technique, Papule Technique).	briefly describes practice techniques (Intra-Dermis Technique, Nappage Technique, Point Injection Technique, Epidermo-Dermis Injection Technique, Papule Technique).	2
15. Preparation of Products to be Selected	describes the preparation of products to be selected.	2
16. Points to Consider in Preparing the Mixture	describes points to consider in preparing the mixture.	2
TOTAL		32

Table 2A: Subjects to be Included in Theoretical Training Program for Dentists and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
MODULE - 1 Introduction to Mesotherapy		4
<p>1. History of Mesotherapy</p> <p>a. 1952 Michel Pistor</p> <p>b. 1958 Michel Bicheron</p> <p>2. Development of Mesotherapy in Turkey and in the World</p> <p>3. Definitions of Mesotherapy</p>	<p>briefly explains the history and development process of mesotherapy.</p> <p>names the development phases of mesotherapy in Turkey and in the world.</p> <p>defines mesotherapy.</p>	
<p>4. Theories Clarifying the Effect Mechanism</p> <p>a. Dr. Pistor's "Reflex Theory" or "Tegument Stimulo-Therapy"</p> <p>b. Dr. Bicheron's "Microcirculation Hypothesis"</p> <p>c. Dr. Dalloz-Bourguignon's "Three Units Theory or Mesoderm Theory"</p> <p>d. Dr. Ballesteros's "Energetic Mesotherapy Theory"</p> <p>e. Dr. Mrejen's "Systematized Spot Mesotherapy Theory"</p> <p>f. Dr. Multedo's "Third Circulation Theory"</p> <p>g. Dr. Kaplan's "Unified Theory"</p> <p>h. Transdermal Mesotherapy "Electroporation"</p> <p>i. Slow Mesotherapy "Mesoperfusion"</p>	<p>explains the principles and contents of mesotherapy.</p> <p>names the effect mechanisms of mesotherapy.</p> <p>describes pathophysiologic factors explaining the theory.</p> <p>describes the evidence-based theoretical principles.</p>	
MODULE - 2 Physiology and Embryology		2
<p>1. Skin Anatomy and Physiology</p> <p>2. Why Dermal Layer?</p> <p>3. Embryology of Mesoderm</p> <p>4. Advantages of Using Mesotherapy</p>	<p>describes the primary subjects of skin anatomy and physiology, which is a practice field of mesotherapy.</p> <p>explains the importance of dermal layer of skin.</p>	

Table 2A: Subjects to be Included in Theoretical Training Program for Dentists and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
	<p>clarifies the underlying reasons of needling the dermal layer.</p> <p>names the function, physiology and effect mechanism of dermal layer.</p> <p>explains the meaning and importance of embryology of mesoderm.</p> <p>explains the relationship between the mesotherapy and mesoderm-related tissues.</p> <p>names the advantages of using mesotherapy.</p> <p>describes the difference between mesotherapy and the other injection systems.</p> <p>explains the reason why mesotherapy is a complementary practice for modern medicine practices.</p>	
MODULE - 3 Materials Used in Mesotherapy		2
1. Manual Practice Methods	names the materials used in mesotherapy.	
2. Mesotherapy Needles		
3. Injectors	describes the needles and their features.	
4. Ancillary equipment	describes the ways of using injectors.	
5. Pressurized Needle-Free Injector Device	explains the objectives and techniques of using ancillary equipment and pressurized injectors.	
6. Transdermal Mesotherapy Device	names transdermal practice mechanism and its practice fields.	
7. Mesoperfusion	<p>defines mesoperfusion.</p> <p>describes mesoperfusion practice method and prescription procedures.</p>	

Table 2A: Subjects to be Included in Theoretical Training Program for Dentists and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
MODULE - 4 Mesotherapy Practice Techniques		6
<p>1. Practice Techniques</p> <p>a. Intra-Dermis Technique</p> <p>b. Nappage Technique</p> <p>c. Point Injection Technique</p> <p>d. Epidermo-Dermis Injection Technique</p> <p>e. Papule Technique</p> <p>2. Points to consider in practice</p> <p>3. Factors Affecting the Success in Mesotherapy</p>	<p>names the practice techniques used in mesotherapy.</p> <p>describes the theoretical principles of practice techniques, and the practice methods.</p> <p>describes the effects, intended purpose and advantages of practice techniques.</p> <p>names the methods and principles to be considered in practice.</p> <p>names the factors affecting the success in mesotherapy</p> <p>describes the practice algorithms.</p> <p>describes the qualities and quantities of the mixtures to be prepared.</p> <p>describes the compliance, adverse effects and effect profiles of the mixtures.</p>	
MODULE - 5 Mesotherapy and Pharmacology		8
<p>1. Criteria for the Products to be Selected</p> <p>2. Points to Consider in Preparing the Mixture</p> <p>3. Drugs Used in Mesotherapy</p> <p>a. Pharmacological Effects</p> <p>b. Doses and Intended Use</p> <p>4. Pharmacology of Skin and Subcutaneous Tissue</p> <p>5. Drugs having Dermal-Epidermal Effects</p> <p>a. Drugs having Effects at Cellular Level</p> <p>a.1. Hormones: Estradiol, Melatonin</p>	<p>names the products to be used in mesotherapy.</p> <p>describes the compliance of and pharmacological criteria for the products.</p> <p>describes the effect mechanism of the products and the cases in which they are ineffective.</p> <p>describes the successful product selection criteria.</p> <p>describes the mixture principles.</p> <p>names the mixture preparation criteria in accordance with the usage indications.</p> <p>describes the pharmacological effects of drugs to be used.</p> <p>describes the doses and intended use of drugs.</p>	

Table 2A: Subjects to be Included in Theoretical Training Program for Dentists and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
a.2. Antiandrogens: Progesterone, Estrogen, Flutamide, Finasteride	describes the pharmacology of skin and subcutaneous tissue.	
a.3. Retinoic Acid	names the pharmacological effects of products that might be effective at dermal-epidermal level.	
b. At Interstitial Level		
b.1. Glycolic Acid, Oligoelement (CU, Zn, S), Vitamin C, Monometilsilanotriol, Proteochondroitin Sulfate A, Glycosaminoglycan Sodium Pyruvate, Hyaluronic Acid, Lactate Amino	describes the effect mechanisms, their intended use and results. names the pharmacological effects of products that might be effective at dermal-epidermal level.	
c. Drugs having Hypodermic Effect	describes the effect mechanisms, their intended use and results.	
c.1. Lipolytic Drugs: Xanthines (Aminophylline, Theophylline), Caffeine, Thyroid Hormones (Triac, L-Thyroxine), Salicylate Monometilsilanotriol, Vasodilator Beta Agonist (Isoproterenol), Vasodilator Alpha-Antagonist (Yohimbine, Phentolamine), Amino Acids (L-Carnitine)	describes the effect mechanism of the products used at hypodermic level. describes the effect mechanisms and results of lipolytic drugs. describes the intended use of drugs affecting vessels and circulatory system.	
6. Drugs having Trophic Metabolic Effects	names the effect mechanisms of these drugs.	
a. Salicilato de Monometilsilanotriol	describes the pharmacological compliance and effects of these drugs.	
b. Asiaticosid	describes the intended use of drugs having trophic effects.	
c. Mesoglycan	names the effect mechanisms of drugs having trophic effects.	
7. Vasoactive Drugs	describes the pharmacological compliance and doses of the drugs having trophic effects as well as their interaction with other drugs.	
a. At Arterioller Level, At Capillary Level At Venular Level, At Precapillary Sphincter Level		

Table 2A: Subjects to be Included in Theoretical Training Program for Dentists and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
<p>c. At Lymphatic Level, At Interstitial Level</p> <p>8. Enzymes</p> <p>a. Mucopolysaccharidase</p> <p>b. Hyaluronidase</p> <p>9. Analgesic and Non Steroid Anti-Inflammatory Drugs</p> <p>a. Diclofenac, Ketoprofen</p> <p>b. Piroxicam, Tenoxicam</p> <p>c. Neurotrophin, Ketorolac</p> <p>10. Local Anesthetic Drugs</p> <p>a. Procaine, Lidocaine, Meprocaine</p> <p>11. Myorelaxant Drugs</p> <p>a. Thiocolchicoside</p> <p>b. Diazepam</p> <p>12. Hormones</p> <p>a. Calcitonin</p> <p>b. Progesterone</p> <p>c. Estrogen</p> <p>13. Vaccines</p> <p>14. Antibiotics</p>	<p>describes the drugs used as enzymes and their intended use.</p> <p>describes the underlying reasons of utilizing drugs that are used as enzymes.</p> <p>names the effect mechanisms of drugs used in mesotherapy.</p> <p>describes the compliance, tissue effects and pharmacology of the drugs used in mesotherapy.</p>	
MODULE - 6 Secondary or Iatrogenic Effects of Mesotherapy		2
<p>1. Needle-Related Effects</p> <p>2. Needle-Related Effects: Noncompliance, Allergic Reactions, Pain, Flash, Erythema, Epigastralgia</p> <p>3. Technique-Related Effects: Pain, Hematoma, Scratching</p> <p>4. Contraindications</p>	<p>describes adverse effects related to the mesotherapy practice.</p> <p>names the secondary effects related to drugs used in mesotherapy.</p> <p>explains the reasons of these effects.</p> <p>describes the adverse effects related to the mesotherapy technique.</p> <p>describes the measures to be taken, actions to be taken, and contraindicated conditions.</p>	

Table 2A: Subjects to be Included in Theoretical Training Program for Dentists and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES Participant successfully completing this program:	DURATION (Hours)
MODULE - 7 Practice Fields of Mesotherapy		10
<p>1. Mesotherapy in Dentistry;</p> <p>a. Mesotherapy practice in periodontology,</p> <p>b. Mesotherapy practice in endodontics,</p> <p>c. Mesotherapy practice in oral surgery and pathology,</p> <p>ç. in TMJ disorders and trismus cases,</p> <p>d. Dent related to dental prosthesis and apparatus usage and mesotherapy practice in intraoral lesions,</p> <p>e. Mesotherapy practice in coagulopathy,</p> <p>f. Neurology and Mesotherapy</p> <p>- Trigeminal Neuralgia</p> <p>- Mesotherapy in Odontogenic Headaches</p>	<p>describes mesotherapy practice in periodontology.</p> <p>describes mesotherapy practice in endodontics.</p> <p>describes mesotherapy practice in oral surgery and pathology.</p> <p>describes mesotherapy practice in TMJ disorders and trismus cases.</p> <p>describes the dent related to dental prosthesis and apparatus usage and the mesotherapy practice in intraoral lesions.</p> <p>describes mesotherapy practice in coagulopathy.</p> <p>describes mesotherapy practice in trigeminal neuralgia.</p> <p>describes mesotherapy practice in odontogenic headaches.</p>	
TOTAL		34

Table 2B: Practice Training Subjects and Learning Objectives and Duration of Each Subject

SUBJECTS	LEARNING OBJECTIVES	DURATION (Hours)
	Participant successfully completing this program:	
1. Asepsis-Antisepsis	names the practice fields of asepsis-antisepsis.	1
2. Preparation of Patient, Anamnesis, Physical Examination	describes the preparation of patient. describes anamnesis of patient. describes physical examination actions.	1
3. Diagnosis and Treatment Principles	names diagnosis and treatment principles.	1
4. Mesotherapy Injection Protocols and Practice	conducts mesotherapy injection protocols and practice principles on a patient or model.	1
5. Approaches Towards Patients with Pain and Practice	conducts the approaches towards patients with pain and practice techniques on a patient or model.	2
6. Session Intervals, Numbers, Dosage and Practice Techniques	realizes session intervals, numbers, dosage and practice techniques.	1
7. Manual Practice Methods	describes manual practice methods.	1
8. Mesotherapy Needles and Injector Use	describes mesotherapy needles and injector use.	1
Ancillary Equipment and Practice	describes ancillary equipment and practices.	1
10. Transdermal Mesotherapy Practice Principles	describes transdermal mesotherapy practice principles.	1
11. Mesoperfusion Practice	describes mesoperfusion practice.	1
12. Practice Techniques (Intra-Dermis Technique, Nappage Technique, Point Injection Technique, Epidermo-Dermis Injection Technique, Papule Technique)	briefly describes practice techniques (Intra-Dermis Technique, Nappage Technique, Point Injection Technique, Epidermo-Dermis Injection Technique, Papule Technique).	2
13. Preparation of Products to be Selected	describes the preparation of products to be selected.	1
14. Points to Consider in Preparing the Mixture	takes actions to be considered in preparing the mixture.	1
TOTAL		16

7.2. Training Materials and Their Features

Materials to be used in training are as follows:

1. Written training materials including subjects in the training content (books, slides, training guidelines, scientific journals, etc.),
2. Audiovisual training materials (compact discs, video films, pictures, etc.),
3. Training contents, discussions (forums and virtual class sessions), presentations, case studies, videos, voice records, etc. developed in a context-specific perspective for the training and transferred into digital environment.
4. All kinds of equipment required to be at a traditional and complementary medicine practice center/unit for mesotherapy practice as per the relevant legislation,
5. All kinds of devices and materials available at the place where the training will take place will be considered as training material.

7.3. Duration of Training

Total duration of Mesotherapy Certification Training Program is illustrated in the Table 3 below.

Table 3: Duration of Mesotherapy Certification Training Program

PARTICIPANTS	DURATION OF TRAINING (Hours)		
	Theory	Practice	Total
Physicians	96	32	128
Dentists	34	16	50

7.4. Evaluation of Training (Exam Procedure, Achievement Criteria, Extra Exam Right, etc.)

The training will be evaluated according to the following procedures and principles.

1. Participants who do not fulfill the requirement of compulsory attendance shall not be allowed to participate in the exam.
2. Theoretical and practice exams shall be conducted at the end of the training program.
3. The participants are supposed to succeed both in theoretical and practice exam separately.
4. Exam questions shall be prepared by the exam committee, composed of minimum three trainers, under the chairmanship of the program officer in a way to cover all the subjects included in the training content.
5. The Practice exams shall be conducted by using Mesotherapy Practice Training Evaluation Form (Annex 1). Each subject included in the form will be rated as Highly Satisfactory (4), Satisfactory (3), Moderately Satisfactory (2), Unsatisfactory (1) or "Not Evaluated" (0). Points obtained from each subject will be totalized. This total will be divided by the number of subjects evaluated and the average is determined. The average will be multiplied by 25 (twenty five) and it will be calculated on the scale of 100 (hundred). Those who score 70 (seventy) points or more out of 100 (one hundred) in the practice exam will be deemed successful.
6. Theoretical exam questions shall be prepared as multiple-choice questions.

7. Participants who score 70 (seventy) points or more out of 100 (one hundred) in the theoretical exam shall be deemed successful. Those who fail to score this minimum point in the theoretical exam shall be allowed to take the exam 2 (two) more times at maximum; those who cannot pass the exam are supposed to apply to the Mesotherapy Certification Training Program again.
8. Participants who cannot pass the theoretical exam are not allowed to take the practice exam.
9. The practice exam shall be conducted by practicing the mesotherapy on a patient and/or on a model.
10. In the practice exam;
 - a. Evaluation, examination, diagnosis and treatment of the patient,
 - b. selection and preparation of drugs to be used,
 - c. preparation of the patient for injection,
 - d. administering injections to patients/models shall be evaluated.
10. Participants who fail to score this minimum point in the practice exam shall be allowed to take the exam 2 (two) more times at maximum; those who cannot pass the exam are supposed to apply to the mesotherapy certification training program again.
11. The objections of the participants who object to the results of their theoretical and practice exams conducted at the end of the mesotherapy certification training program shall be evaluated and concluded by the certification training providers in 5 (five) days at the latest.
12. For certification, the success point of a participant shall be determined by averaging the points obtained in the theoretical and practice exams.
13. Participants who pass the theoretical and practice exams shall be awarded their certification.
14. The certification shall be registered by the Ministry of Health.

8. PROGRAM OFFICER AND HER/HIS QUALIFICATIONS

Physicians, dentists or academic members of the relevant field are the program officers of the mesotherapy certification training program.

9. TRAINERS AND THEIR QUALIFICATIONS

Those who have any one of the following qualifications shall be assigned as trainer:

1. Academic members and/or specialist physicians who have made presentations in national/international congresses in the field of mesotherapy,
2. Academic members and/or specialist physicians who have worked as trainers in national/international congresses in the field of mesotherapy,
3. Physicians and Dentists who have minimum 2 (two) national/international scientific publications on mesotherapy,
4. Specialists and academic members in other fields than mesotherapy practice,
5. Those who are foreign national and document that they have actively practiced their profession and received mesotherapy training in an

international platform and who are deemed to be qualified by the committee established by the relevant unit.

NOTE: The practice centers are obliged to notify the Ministry of Health about the qualifications and names of the trainers.

10. PROPERTIES OF THE TRAINING PLACE

Mesotherapy practice certification training program can be prepared by the institution/organization having the relevant “practice center”. The training place shall:

For distance learning;

1. have a Learning Management System compliant with international learning content standards (Scorm, AICC, etc.),
2. have a Learning Management System (LMS) Management panel,
3. have a server and infrastructure architecture in parallel with the capacity of the trainees,
4. ensure that video conferencing software and infrastructures are integrated into the system so as to provide simultaneous trainings,

The Training Place for Theory and Practice Trainings shall:

1. have a server and infrastructure architecture in parallel with the capacity of the trainees,
2. have adequate number of chairs and desks for participants,
3. be a practice center which the Ministry allows to open,
4. have computer and audiovisual devices which will allow for carrying out the training using appropri-

ate technology; practice models; a blackboard; a printer, xerox machine and paper support systems ensuring that participants are provided with training objectives, subjects and contents/presentations; etc.

11. VALIDITY PERIOD OF THE CERTIFICATE

The validity period of the certificate is 7 (seven) years.

12. CERTIFICATE RENEWAL CRITERIA

1. At the end of the validity period of the certificates, among the certificate-holders;
 - a. The certificates of those who document that they attended national/international trainings or scientific meetings on mesotherapy practice at least 4 (four) times within the validity period of the certificate after receiving that certificate or those who published an article on mesotherapy practice in 2 (two) national/international peer-reviewed journals or those who document that they worked actively on this field for 2 (two) years shall be renewed. The certificate-holders shall submit their documentation related to these criteria during the certificate renewal application to the certification training providers that awarded the certificate to them.
 - b. Those who do not fulfil any criteria in paragraph (a) need to take the certificate renewal exam.
2. The renewal exam shall be conducted as a theoretical exam con-

sisting of multiple-choice questions prepared in line with the recent developments in the field and the subjects in the relevant training program by the implementers of meso-therapy practice certification training program under the coordination of the relevant unit of the Ministry.

3. Participants who score 70 (seventy) or more points in the renewal exam shall be deemed successful and the duration of their certificates shall be extended for another 5 (five) years.
4. The certificates of the certificate-holders shall be valid until the certificate renewal exam process is completed.
5. The certificates of those who fail to attend the certificate renewal exam twice in a row shall be deemed invalid, except in cases of legally acceptable excuses. Following the end of the legally acceptable excuse, they shall be tested as soon as possible.
6. In cases when the training activities of the entity with the authorization to provide certification training program are stopped or its certification training provision authorization documents are cancelled for any reason or in cases of shut-down and transfer, the certificate renewal exams shall be conducted by the relevant unit of the Ministry.
7. The objections of the certificate-holders, who fail in the certificate renewal exam, to the renewal exam results shall be evaluated and concluded in maximum 5 (five) working days by the certificate renewal exam committee.

13. PROCEDURES AND PRINCIPLES OF EQUIVALENCE PROCESSES

Equivalence shall be requested by using the equivalence application form prepared by the Ministry in line with the provisions of the regulation on certification training of the Ministry of Health.

It is mandatory to submit all the documents specified in this form.

Each section specified in this form shall be filled in detail, the notarized copies of the below-listed documents approved by the institution/organization which provided the training and the translation of the documents into Turkish by a certified translator if the training is received abroad shall be submitted as attachment to the form.

Documents to be attached to the Application Form:

1. Notarized copy of the certificate.
2. Notarized copy of the Faculty of Medicine/Faculty of Dentistry diploma.
3. Notarized copy of postgraduate education certificate, if available.
4. A copy of Turkish Identification Card/ Foreign Identification Card and 2 (two) photographs.
5. All information and documentation related to the Training Curriculum specified in the 4th paragraph of the Application Form (the original of the document in the language of the training and the document and its translation into Turkish).
6. Document proving that Physicians received at least 128 hours of training / that Dentists received at least 50 hours of training as well as the Training Curriculum.

7. The applicant will be requested to submit a document which is received from the official health authority of the country of training or the head of mission of Turkey and shows that the Institution/Organization/Private Law Legal Entity/Natural Person who/which provided the training and who/which is included in the 3rd paragraph of the Application Form is authorized to provide training.
 8. The applicant will be requested to document that s/he resided in the country in which s/he received training for as long as the training duration with his/her passport or other official documents and the formally-commissioned officials will be requested to provide documentation proving that they were off duty in the said period.
4. Participants who cannot pass the theoretical exam shall not be allowed to take the practice exam.
 5. The practice exam shall be conducted by practicing the mesotherapy on a patient and/or on a model.
 6. In the practice exam;
 - a. Evaluation, examination, diagnosis and treatment of the patient,
 - b. selection and preparation of drugs to be used,
 - c. preparation of the patient for injection,
 - d. administering injections to patients/models shall be evaluated.
 7. Applicants who score 70 (seventy) points or more out of 100 (one hundred) in the practice exam shall be deemed successful. Those who fail to score this minimum point in the practice exam shall be allowed to take the exam 2 (two) more times at maximum; those who cannot pass the exam are supposed to apply to the Mesotherapy Certification Training Program.

How to carry out the Equivalence Procedures

1. The application files of those who apply for certificate equivalence shall be examined in line with the Mesotherapy Certification Training Program Standards by a mesotherapy practice science committee to be set up by the relevant unit.
 2. Applicants whose files are deemed suitable and sufficient shall be tested with theoretical and practice exam.
 3. Applicants who score 70 (seventy) points or more out of 100 (one hundred) in the theoretical exam shall be deemed successful. Those who fail to score this minimum point in the theoretical exam shall be allowed to take the exam 2 (two) more times at maximum; those who cannot pass the exam are supposed to apply to the Mesotherapy Certification Training Program.
 4. Certificate Equivalency Document shall be drawn up for the applicants who pass the theoretical and practice exams.
 5. Certificate Equivalency Document shall be registered by the Ministry of Health.
- #### 14. PROVISIONAL CLAUSE
- Physicians or Dentists who, before this standard is published, fulfill at least one of the following requirements as:

1. having published and/or received approval for minimum 2 (two) scientific publications on the relevant field,
2. having conducted postgraduate thesis study on the relevant field, shall be awarded Mesotherapy Practice Certificate equivalence for one time

only on condition that they are evaluated by a committee established by the relevant unit of the Ministry without taking any exams if they apply to the Ministry within 6 (six) months as of the publication date of this standard.