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Decreto Rettore Università di Roma “La Sapienza” n. 1897/2024 del 30.07.2024

VITTORIA CAMMISOTTO
Curriculum Vitae

Place: Rome

Date: 3/09/24

Part I – General Information

Full Name	Vittoria Cammisotto
Spoken Languages	Italian and english

Part II – Education

Type	Year	Institution	Notes (Degree, Experience)
University graduation	2012	Sapienza University of Rome	Master Degree in “Cellular Biology”. Mark: 110/110 with Honours
<i>Professional qualification Biologist</i>	2012	University of Rome "Tor Vergata"	<i>Section A - professional qualification Biologist</i> (sezione A; N° di iscrizione all’Ordine AA_068852).
Specialisation School	2017	Sapienza University of Rome	Specialist in “ <i>Pharmacology and Clinical Toxicology</i> ” Mark: 70/70 with Honours
PhD	2022	Sapienza University of Rome	PhD in <i>Angio-Cardio-Thoracic Pathophysiology and Imaging</i> Mark: with Honours

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
2017	2017	Sapienza University of Rome, Department of Internal Medicine and Medical Specialties	Scholarship
2018	2018	Sapienza University of Rome, Department of Internal Medicine and Medical Specialties	Scholarship
2022	In progress	Sapienza University of Rome, Department of Clinical, Internal Medicine, Anesthesiological and	RTDA, s.c. 06/N1- ssd MED/46

		Cardiovascular Sciences	
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IIIB – Other Appointments

2015	2016	CREA · Council for Agricultural Research and Economics, Rome	Coordinated and Continuous Collaboration Assignment (Co.Co.Co). Reaserch Project: “ <i>MEDITO (MEditerranean Diet Tackled under an Emic perspective)</i> ”
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Part IVa – Teaching experience

Year	Institution	Lecture/Course
2020/2021	Sapienza University of Rome, Nursing (qualifying for the health profession of Nurse) ROME - Degree Course A - Azienda Policlinico Umberto I L/SNT1	Applied Physics
From 2021 to date	Sapienza University of Rome, Nursing (qualifying for the health profession of Nurse) ROME - Degree Course A - Azienda Policlinico Umberto I L/SNT1	Applied Biology
From 2021 to date	Sapienza University of Rome, Pediatric Nursing degree course - Roma Azienda Policlinico Umberto I L/SNT1	Pathology and Physiopathology
From 2022 to date	Sapienza University of Rome, Medicine and Surgery degree course "E" - Latina LM-41.	Biology and Genetics I e II
From 2022 to date	Sapienza University of Rome, Dental hygiene degree course- Degree Course D - ASL Rieti L/SNT3	Applied Biology
From 2023 to date	Sapienza University of Rome, Nursing (qualifying for the health profession of Nurse) - Degree Course O - Frosinone ASL Frosinone Umberto I L/SNT1	Applied Biology

Part IVb– Teaching experience in PhD course

2023	Sapienza University of Rome, PhD course in <i>Angio-Cardio-Thoracic Pathophysiology and Imaging</i>	Lesson Title: “ <i>La PCSK9 oltre i lipidi: ruolo nello stress ossidativo e nella trombosi</i> ”
2023	Sapienza University of Rome, PhD course in <i>Angio-Cardio-Thoracic Pathophysiology and Imaging</i>	Lesson Title: “ <i>Ruolo della supplementazione con antiossidanti nella pratica</i> ”

		<i>clinica: focus sui fattori di rischio cardiovascolare</i>
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Part Va - Society memberships, Awards and Honors

Year	Title
From 2023 to date	Italian Society of Translational Research and Health Professions (SIRTEPS)
From 2019 to date	Member of the Italian Society of Atherosclerosis Study (SISA)
From 2022 to date	Member of the Italian Society for the Study of Haemostasis and Thrombosis (SISET)
2019	Best Oral Communication Award - 36th Congress of Cardiology – “Knowing and Treating the Heart” - Session entitled "Basic Science". Title: <i>"Glycoprotein (GP) VI and platelet activation mediated by Nox2: effect of rivaroxaban in association and not with aspirin"</i>
2021	Best Communication Award (Poster section)- 35th National Congress of the Italian Society for the Study of Atherosclerosis (SISA) - Virtual Edition. Title: “Effect of anti-PCSK9 monoclonal antibody therapy on platelet activation in patients with familial hypercholesterolemia”.
2023	Eligible to be appointed as associate professor for the “Settore Concorsuale 06/N1”, from 17/12/2023 to 17/12/2034

Part Vb - Selection for Oral Presentation at national and international conferences

2017	Selected speaker at XVIII National congress “Gruppo di Studio delle Piastrine”. Oral presentation title: <i>“Glucocorticoids impair platelet thromboxane biosynthesis in community-acquired pneumonia”</i>
2018	Selected speaker at XIX National congress “Gruppo di Studio delle Piastrine”. Oral presentation title: <i>“Glicoproteina (GP) VI e attivazione piastrinica mediata dalla Nox2: effetto del rivaroxaban in associazione e non con aspirina”</i>
2018	Selected speaker at XXV National Congress of “Società Italiana per l'emostasi e la trombosi, SISET”. Oral presentation title: <i>“Rivaroxaban enhances the antiplatelet activity of aspirin via impairing Nox2-mediated thromboxaneA2 and isoprostanes biosynthesis”</i>
2019	Selected speaker at 35° National Cardiology Congress of “Conoscere e curare il cuore”. Oral presentation title: <i>“Glicoproteina (GP) VI e attivazione piastrinica mediata dalla Nox2: effetto del rivaroxaban in associazione e non con aspirina”</i>
2019	Selected speaker at XX National congress “Gruppo di Studio delle Piastrine”. Oral presentation title: <i>“PCSK9 regulates Nox2-mediated platelet activation by CD36 receptor: implications in patients with atrial fibrillation”</i>
2019	Selected speaker at 33° National Congress of “Società Italiana Studio

	Aterosclerosi (SISA)". Oral presentation title: <i>"PCSK9 regulates Nox2-mediated platelet activation by CD36 receptor: implications in patients with atrial fibrillation"</i>
2020	Selected speaker at XXVI National Congress of "Società Italiana per l'emostasi e la trombosi, Siset". Oral presentation title: "Effect of anti-PCSK9 monoclonal antibody therapy on platelet activation in patients with familial hypercholesterolemia"
2020	Selected speaker at 33° National Congress of "Società Italiana Studio Aterosclerosi (SISA)". Oral presentation title: <i>"Effect of anti-PCSK9 monoclonal antibody therapy on platelet activation in patients with familial hypercholesterolemia"</i>
2022	Selected speaker at XXX International Congress of "International Society on Thrombosis and Haemostasis (ISTH)"- London, UK. Oral presentation title: <i>"Toll-Like Receptor 4-Dependent and Independent platelet-dependent thrombosis in SARS-CoV-2 Infection"</i>
2022	Selected speaker at XXI National congress "Gruppo di Studio delle Piastrine". Oral presentation title: <i>"Toll-Like Receptor 4-Dependent and Independent platelet-dependent thrombosis in SARS-CoV-2 Infection"</i>
2022	Selected speaker at XXVI National Congress of "Società Italiana per l'emostasi e la trombosi, Siset". Oral presentation title: <i>"Toll-Like Receptor 4-Dependent and Independent platelet-dependent thrombosis in SARS-CoV-2 Infection"</i>
2023	Selected speaker at 40° National Cardiology Congress of "Conoscere e curare il cuore". Oral presentation title: <i>"Toll-Like Receptor 4-Dependent and Independent platelet-dependent thrombosis in SARS-CoV-2 Infection"</i>
2023	Selected speaker at XXX International Congress of "International Society on Thrombosis and Haemostasis (ISTH)"-Montreal, Canada. Oral presentation title: <i>"Proprotein convertase subtilisin kexin type 9 inhibitors reduce platelet NETs release driver thrombosis in familial hypercholesterolemia"</i>
2023	Selected speaker at XXVI National Congress of "Società Italiana per l'emostasi e la trombosi, Siset". Oral presentation title: <i>"Proprotein convertase subtilisin kexin type 9 inhibitors reduce platelet NETs release driver thrombosis in familial hypercholesterolemia"</i>
2024	Selected speaker at 41° National Cardiology Congress of "Conoscere e curare il cuore". Oral presentation title: <i>"Proprotein Convertase Subtilisin Kexin type 9 inhibitors reduce platelet NETs release driver thrombosis in familial hypercholesterolemia"</i>

Part Vc - Invitation for Oral Presentation and Moderation at national and international conferences

2020	Invited speaker at Region Lazio Congress of "Società Italiana Studio Aterosclerosi (SISA) Oral presentation title: "LPS, PCSK9 e attivazione piastrinica: una triade pericolosa"
2022	Invited speaker at Region Lazio Congress of "Società Italiana Studio

	Aterosclerosi (SISA) Oral presentation title: <i>"Stress ossidativo, funzione endoteliale e fumo: prodotti del fumo a rischio modificato"</i>
2022	Moderator at Webinar of "Società Italiana per l'emostasi e la trombosi, Siset". Section Title: <i>"La disfunzione endoteliale nella patogenesi della trombosi: il modello dei progenitori endoteliali circolanti."</i>
2022	Moderator at National Congress of "Antitrombosi 2.0". Section Title: <i>"Antipiastrinici nei setting clinici"</i>
2023	Moderator at Region Lazio Congress of "Società Italiana Studio Aterosclerosi (SISA)". Section Title: <i>"Simposio biologia e laboratorio nell'aterosclerosi"</i>

Part Vd – Editorial Board

2022	Guest Editor of Special Issue "Effects of Dyslipidemia and Metabolic Syndrome on Cardiac and Vascular Dysfunction, International journal Molecular Science"
2022	Guest Editor of the Special Issue "Role of Oxidative Stress, Metabolic and Inflammatory Processes in Platelet Activation: A Contribution from the Italian Study Group on Platelets (GSP)" on Antioxidants
2022	Guest Editor of the Special Issue Oxidative Stress and Reactive Oxygen Species in Cardiovascular Disease" on Antioxidants

Part Ve – Reviewer

From 2019 to date	Review Editor for "Frontiers in Medicine"- Hematology
From 2019 to date	Reviewer for the following international scientific journals: Antioxidants, Molecules, International J molecular Science, Nutrients, Diabetes Metabolism Research and Reviews, International J of clinical practice, Frontiers

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2021	"Effetto della terapia con anticorpi monoclonali anti-PCSK9 sulla funzione piastrinica in pazienti con ipercolesterolemia familiare."	Principal Investigator , Progetti per Avvio alla Ricerca – Tipo 2, code AR22117A883B9B1E	
2021	"The possible role of MST1 in the development of vascular disease."	Unit Collaborator , Progetti ordinari finalizzata (RF), code RF-2021-12375256	
2023	"The role of gut permeability in patients with cardiovascular disease"	Principal Investigator , Rosiny Foundation Grant (Heidelberg, Germany)	

Part VII a – Research Activities

Keywords	Brief Description
<ul style="list-style-type: none"> Mechanisms of platelet activation and atherothrombosis Gut-derived LPS 	<p>Among mechanisms that elicit platelet activation, oxidative stress plays a major role favouring platelet hyperactivity. Indeed, upon stimulation by physiological agonists, human platelets generate and release several types of reactive oxygen species (ROS) by NOX2 activation. More recently, I studied other mechanisms of platelet activation such as during an inflammatory response. In these pathological conditions, platelet activation could be mediated by different promoting factors such as LPS that is able, at a concentration similar to that we found in human circulation, to trigger platelet aggregation and activation.</p> <p>LPS could be derived from gut microbiota as a consequence of dysbiosis. Therefore, I studied the role of gut-derived LPS on platelet activation and thrombus formation and demonstrated that LPS promotes platelet aggregation and thrombus growth, by binding to TLR4, is able to amplify platelet activation assessed in terms of increased expression of sCD40L, sP-selectin and TXB2, through a mechanism mediated by the up-regulation of NOX2 assessed by phosphorylation of p47phox and H₂O₂ production.</p>
<ul style="list-style-type: none"> NOX2-mediated oxidative stress NOX2 regulation mechanisms 	<p>I studied, in cardiovascular diseases, the role of NADPH oxidase and in particular its isoform NOX2, the most important ROS-producing enzyme.</p> <p>I have shown that Nox2 activation is upregulated in patients with cardiovascular risk factors through various mechanisms such as GPVI. I have also shown that this mechanism can be induced by various factors, such as metal proteinases and specifically MMP2, which cleave a small fragment of Nox2 located in the third extracellular domain of the enzyme; or that Nox2 activation is also modulated by an alteration in the autophagic process.</p>
<ul style="list-style-type: none"> PCSK9-mediated platelet activation and oxidative stress 	<p>I studied the mechanisms of platelet activation induced by PCSK9. In particular, I looked at how PCSK9 is able to regulate and activate Nox2, leading to increased production of oxLDL with consequent platelet activation and thrombus formation.</p>
<ul style="list-style-type: none"> Antioxidant treatment Nutraceutical approach 	<p>Oxidative stress is a common feature of many human disorders, such as cardiovascular disease. Many of the risk factors, including smoking, hypertension, hypercholesterolemia, diabetes, and obesity, are associated with an increased risk of developing cardiovascular disease, involving an elevated oxidative stress burden (either due to enhanced ROS production or decreased antioxidant protection). There are many therapeutic options to treat oxidative stress-associated cardiovascular diseases. Numerous studies have focused on the utility of antioxidant supplementation. Therefore, I evaluated the effect of some</p>

	antioxidant demonstrating that 1) a high adherence to the Mediterranean diet reduces oxidative stress in patients with NAFLD; 2) specific components of extra-virgin olive oil (EVOO) such as oleuropein, improves the post-prandial glycemic profile in diabetic patients; 3) a Mix of polyphenols (catechin and epicatechin) and threolose, a disaccharide, reduce the impact of risk factors on the onset of cardiovascular disease.
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Part VIIb – Research Collaboration with research group at national or international level

Study Group/Role	Brief Description
ATHERO-AF National Working Group Atherosclerosis in Atrial Fibrillation Collaborator	ClinicalTrials.gov identifier: NCT01882114. Coordinated by Prof. Daniele Pastori (Sapienza University of Rome). The study focuses on the identification of new clinical and biochemical prognostic risk factors in patients with atrial fibrillation. The collaboration has produced the following publications: 1) Antioxidants (Basel). 2022 Apr 1;11(4):698; 2) Intern Emerg Med. 2021 Nov;16(8):2063-2068; 3) Mayo Clin Proc. 2020 Mar;95(3):513-520; 4) Atherosclerosis. 2019 Oct;289:195-200; 5) J Am Heart Assoc.2018 Nov 20;7(22):e009509; 6) Int J Cardiol. 2018 Aug 1;264:58-63; 7) J Am Coll Cardiol. 2017 Sep 19;70(12):1455-1462.
ATHERO-APS Study Group National Working Group on Atherosclerosis in Antiphospholipid Syndrome Collaborator	The study focuses on evaluation of cardiac and vascular characteristics of patients affected by APS, coordinated by Prof. Pasquale Pignatelli (Sapienza University of Rome). The collaboration has produced the following publications: 1) J Autoimmun. 2022 May;129:102832; 2) J Clin Med. 2021 Jul 19;10(14):3180.
PACIFIC-AF A multicenter, Multicenter, randomized, active comparator-controlled, double-blind, double-dummy, parallel group, dose-finding Phase 2 Sub-Investigator	PACIFIC-AF is a randomized, double-blind, Phase 2 study comparing asundexian 20 mg or 50 mg once daily with apixaban 5 mg twice daily in patients with atrial fibrillation. (ClinicalTrials.gov, NCT04218266 and EudraCT, 2019-002365-35.
OCEANIC-AF Multicenter, international, randomized, active comparator-controlled, double-blind, double-dummy, parallel group, 2-arm Phase 3	OCEANIC-AF is a multicenter, randomized, controlled trial that aims to find the best dose of the new drug BAY 2433334 to give to participants and see how it works in patients with atrial fibrillation, which can lead to blood clots, stroke, and other heart complications. It also wants to compare the safety of the study drug with apixaban, a nonvitamin K oral anticoagulant (NOAC) in patients with

Study Coordinator	atrial fibrillation. This study is also being done to learn how the drug in this study moves in, through, and out of the body. (ClinicalTrials.gov Identifier: NCT04218266)
REVERSE-IT Randomized placebo-controlled double-blinded	This clinical study aims to evaluate the efficacy of TOTUM-63, a blend of 5 plant extracts, consumed three times a day on glucose and lipid homeostasis in dysglycemic subjects. (ClinicalTrials.gov Identifier: NCT04423302)
Study Coordinator	
“Relationship between Mitochondrial-derived peptides (MDPs) and Adherence to the Mediterranean Diet in patients with Atrial Fibrillation” International collaboration with the “University of Southern California, Leonard Davis School of Gerontologies”	The study focuses on evaluation of the circulating levels of Mitochondrial-derived peptides (MDPs) in a sub-cohort of patients with atrial fibrillation (80 patients), recruited from the Atherothrombosis Centre of the Department of Clinical, Internal, Anesthesiologic and Cardiovascular Sciences, of the Sapienza University of Rome and followed for over 7-years for cardiovascular diseases and events with low and high adherence to the Med-Diet. This research project is partially supported by the Hanson- Thorell Family Research Awards
Collaborator	

Part VIII– Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	95	Scopus	2015	2024
Books [scientific]	1	"Smoking Prevention and Cessation" IntechOpen (doi.org/10.5772/intechopen.78319) (ISBN 978-953-51-6072-4);	2018	/
Books [scientific]	1	"Innovative in vitro models for the study of lung diseases" IntechOpen (DOI: 10.5772/intechopen.95300) (ISBN 978-953-51-6072-4)	2022	/

Total Impact factor	663,308
Total Citations	2197
Average Citations per Product	23,05
Hirsch (H) index	23
Normalized H index*	2.55

*H index divided by the academic seniority.

Part IX– Selected Publications

List of the publications selected for the evaluation. For each publication report title, authors, reference data, journal IF (if applicable), citations, press/media release (if any).

1. Violi F, Pastori D, Pignatelli P, **Cammisotto V**. Endotoxemia and Platelets: 2 Players of Intrahepatic Microthrombosis in NAFLD. *JACC Basic Transl Sci*. 2023 Sep 27;9(3):404-413. doi: 10.1016/j.jacbts.2023.07.003. PMID: 38559621; PMCID:PMC10978333. **(Review; IF: 8.4)**
2. Carnevale R, **Cammisotto V***, Bartimoccia S, Nocella C, Castellani V, Bufano M, Loffredo L, Sciarretta S, Frati G, Coluccia A, Silvestri R, Ceccarelli G, Oliva A, Venditti M, Pugliese F, Maria Mastroianni C, Turriziani O, Leopizzi M, D'Amati G, Pignatelli P, Violi F. Toll-Like Receptor 4-Dependent Platelet-Related Thrombosis in SARS-CoV-2 Infection. *Circ Res*. 2023 Jan 13. doi:10.1161/CIRCRESAHA.122.321541. **(Original Article; Co-primo, IF: 16.5)**
3. Violi F, Pignatelli P, Castellani V, Carnevale R, **Cammisotto V.*** Gut dysbiosis, endotoxemia and clotting activation: A dangerous trio for portal vein thrombosis in cirrhosis. *Blood Rev*. 2022 Aug 12:100998. doi:10.1016/j.blre.2022.10099 **(Review; IF: 6.9)**
4. Baratta F, **Cammisotto V***, Tozzi G, Coronati M, Bartimoccia S, Castellani V, Nocella C, D'Amico A, Angelico F, Carnevale R, Pignatelli P, Del Ben M. High Compliance to Mediterranean Diet Associates with Lower Platelet Activation and Liver Collagen Deposition in Patients with Nonalcoholic Fatty Liver Disease. *Nutrients*. 2022 Mar 12;14(6):1209. doi: 10.3390/nu14061209. **(Original Article; Co-Primo; IF: 5.9)**
5. **Cammisotto V**, Baratta F, Simeone PG, Barale C, Lupia E, Galardo G, Santilli F, Russo I, Pignatelli P. Proprotein Convertase Subtilisin Kexin Type 9 (PCSK9) Beyond Lipids: The Role in Oxidative Stress and Thrombosis. *Antioxidants (Basel)*. 2022 Mar 16;11(3):569. doi: 10.3390/antiox11030569. **(Review; IF: 7.0)**
6. Barilla F, **Cammisotto V***, Bartimoccia S, Loffredo L, Nocella C, Bruno N, Torromeo C, Rosa P, Viceconte N, Pignatelli P, Gaudio C, Carnevale R, Violi F. Toll-like receptor 4 activation in platelets from myocardial infarction patients. *Thromb Res*. 2022 Jan;209:33-40. doi: 10.1016/j.thromres.2021.11.019 **(Original Article; Co-Primo; IF: 7.5)**
7. Irace FG, **Cammisotto V***, Valenti V, Forte M, Schirone L, Bartimoccia S, Iaccarino A, Peruzzi M, Schiavon S, Morelli A, Marullo AGM, Miraldi F, Nocella C, De Paulis R, Benedetto U, Greco E, Biondi-Zoccai G, Sciarretta S, Carnevale R, Frati G. Role of Oxidative Stress and Autophagy in Thoracic Aortic Aneurysms. *JACC Basic Transl Sci*. 2021 Oct 25;6(9-10):719-730. doi:10.1016/j.jacbts.2021.08.002. **(Original Article; Co-Primo; IF: 9.5)**
8. **Cammisotto V**, Baratta F, Castellani V, Bartimoccia S, Nocella C, D'Erasmo L, Cocomello N, Barale C, Scicali R, Di Pino A, Piro S, Del Ben M, Arca M, Russo I, Purrello F, Carnevale R, Violi F, Pastori D, Pignatelli P. Proprotein Convertase Subtilisin Kexin Type 9 Inhibitors Reduce Platelet Activation Modulating ox-LDL Pathways. *Int J Mol Sci*. 2021 Jul 3;22(13):7193. doi: 10.3390/ijms22137193. **(Original Article; IF: 5.9)**
9. Oliva A, **Cammisotto V***, Cangemi R, Ferro D, Miele MC, De Angelis M, Cancelli F, Pignatelli P, Venditti M, Pugliese F, Mastroianni CM, Violi F. Low-Grade Endotoxemia and Thrombosis in COVID-19. *Clin Transl Gastroenterol*. 2021 Jun 4;12(6):e00348. doi: 10.14309/ctg.0000000000000348. **(Original Article; Co-primo; IF: 4.4)**
10. Nocella C *, **Cammisotto V***, Bartimoccia S, Castellani V, Loffredo L, Pastori D, Pignatelli P, Sanguigni V, Violi F, Carnevale R. A novel role of MMP2 in regulating platelet NOX2 activation. *Free Radic Biol Med*. 2020 Apr 5:S0891-5849(20)30359-2. doi: 10.1016/j.freeradbiomed.2020.03.033. **(Original Article; Co-primo; IF: 7.4)**
11. **Cammisotto V**, Pastori D, Nocella C, Bartimoccia S, Castellani V, Marchese C, Scavalli AS, Ettorre E, Viceconte N, Violi F, Pignatelli P, Carnevale R. PCSK9 Regulates Nox2-Mediated Platelet Activation via

CD36 Receptor in Patients with Atrial Fibrillation. Antioxidants (Basel). 2020 Apr 2;9(4):E296. doi:10.3390/antiox9040296. **(Original Article; IF: 6.3)**

12. **Cammisotto V**, Carnevale R, Nocella C, Stefanini L, Bartimoccia S, Coluccia A, Silvestri R, Pignatelli P, Pastori D, Violi F. Nox2-mediated platelet activation by glycoprotein (GP) VI: Effect of rivaroxaban alone and in combination with aspirin. Biochem Pharmacol. 2019 May;163:111-118. doi: 10.1016/j.bcp.2019.02.016. **(Original Article; IF: 4.96)**

Luogo e data

Roma, 3/09/2024

Firma

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(non soggetta ad autentica ai sensi dell'art. 39 del D.P.R. 28.12.2000, n. 445)