


Curriculum Vitae

Full Name:	DR. MANISHA NIGAM			
Designation:	Assistant Professor			
Department:	Biochemistry			
Campus:	Birla/Chauras			
Telephone:	01346-250258	Address	Dept. of Biochemistry, School of Life Sciences, HNBGU, Srinagar, Garhwal-246174, Uttarakhand	
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Education Qualification:	Ph.D., Allahabad University/C.D.R.I. Lucknow, 2010			
Teaching Experience:	07 Years	Research Experience:	13 Years	
<p>Research Interest and Fields of Specialization</p> <ol style="list-style-type: none"> 1. Cancer Biology 2. Natural Anticancer Products 3. Oxidative Stress 				
<p>Honours & Awards</p> <ul style="list-style-type: none"> • Fox Asia conference & Awards 2020 by Social Talks (Registration NO. 228/2019) for “Research excellence award in field of Biochemistry” • P.C. Dandiya best poster presentation Award. • CSIR-SRF (Oct 2006-Sept 2009) • C.S.I.R. (NET) - JRF of December 2003 (Oct 2004- Oct 2006) <p>Editorial Board Member:</p> <ul style="list-style-type: none"> • International Scientific Journal http://www.scientific-journal.com/index.html • Current trends in Pharma and Pharmaceutical sciences www.medcavepublications.org • European journal of biomedical research https://www.ejbmr.com 				
<p>Membership of Scientific Organizations</p> <ul style="list-style-type: none"> • The Indian Science Congress, India. Life membership (Membership No. L30115) • The Society of Biological Chemists, India. Life membership (Membership No. 3799) • Indian association of cancer research, Mumbai. Life membership (Membership No. 947) • International Biotech Technocrats & Consultants Association, India. Life membership (ID: IBTCA/TA/18/1013) 				

Research Guidance:

M.Sc. (Dissertation)

Thesis Awarded: 16

Research Projects/ MoU undertaken

1. Title, Funding Agency, Total Cost, Completed/Ongoing

"Influence of the Ageing on Biochemical and Physiological changes in Plants: Insight into the interlinking of Redox Regulation" UGC-BSR Research Start-Up-Grant worth Rs. 6 lakh (Completed)

ADMINISTRATIVE EXPERIENCE

1. Incharge Head, Dept of Biochemistry since Aug 2014 to Jan 2019.
2. Member of Anti Ragging squad since August 2019.
3. Member of Institutional Ethical Committee (I.E.C; ICMR) w.e.f. 15-05-2019 to 14-05-2021.
4. Member of Board of Studies of Department of Biochemistry, H.N.B. Garhwal University (Since 2014-till date).
5. N.S.S. Programme officer, Birla campus Unit, H.N.B. Garhwal University since January 2018.
6. Member of Anti-Discrimination committee, May 2016 to April 2018.
7. Assistant Proctor since (2016-till date)
8. Member of the University Inspecting Team visiting different Colleges in connection with the extension of their affiliations.
9. Team Incharge (Science faculty) for the selection of students for the annual cultural fest programme 2017-8
10. Member of Selection Committee for Guest Faculty appointment in the Department of Biochemistry, HNBGU (2014-2019).
11. Election Officer of Student Union Election (2014, 2016).
12. Member of Departmental Purchase Committee, Department of Biochemistry (since 2014-till date).
13. Member of UG (2016, 2017, 2019) Admission Committee.
14. Convener of PG Admission Committee (2016-18) & Member of PG Admission Committee (2019).
15. Member of Registration Committee of National conference on Microbes in Extreme Environment: Diversity and Translational Applications (MEEDTA-2015) organized by HNB Garhwal University (A Central University), Srinagar(Garhwal), (October 30-31, 2015)

COURSES AND WORKSHOP

1. One week course on Research methodology organized by Faculty development centre, HNB Garhwal University (A Central University), Srinagar (Garhwal) (10th-16th Dec 2018).
2. One Day National Workshop on "Intellectual Property Rights" organized by **Department of Pharmaceutical Chemistry**, Chauras campus, HNB Garhwal University, Srinagar (17th Nov 2018)

3. Refresher course in Life Sciences and Biotechnology (08 Oct- 02 Nov 2018) from JNU, HRDC, New Delhi with "A" Grade.
4. Two days training Programme on 'Ethics & Values in Public Governance.' By Mr. Krishna Mohan, IAS (Retd.), a DoPT certified National Trainer/ Facilitator on 'Ethics' organized by the Internal Quality Assurance Cell (IQAC), HNB Garhwal University (A Central University), Srinagar (Garhwal). (May 28-29, 2017)
5. Refresher Course from Lucknow University, (9th Dec-31st Dec 2016) with "A" grade.
6. Orientation course (24th Aug-18th Sept 2015) from JNU, HRDC, New Delhi with "A" Grade.

CONFERENCES

INTERNATIONAL

1. Oral presentation at: International conference on "Aerosols, Air Quality, and Climate Change (AAC-2018) on Himalayan Region of Uttarakhand" in the Department of Physics, School of Science, HNBGU, Srinagar (Garhwal), India on 21-23 October, 2018, titled "Environmental pollution and breast cancer: An insight into the linkage" Nigam M
2. Oral presentation at: International conference on "Research advancements in Pharmaceutical and clinical sciences" at LTR Institute of Technology (Pharmacy), Kurali, Merrut, India, 4-5th Oct 2017. titled "Influence of the Ageing on antioxidant enzymes activity in Tomato". Nigam M
3. Oral presentation at: *International Conference on Advances in Biomedical Engineering, Cancer Biology, Bioinformatics and Applied Biotechnology (ABECBAB-2016) Organized by "Krishi Sanskriti" on 21st may, 2016 at Jawaharlal Nehru University, New Delhi* titled: Caspase inhibition restrains Centchroman induced apoptosis in Human Breast Cancer cells. Nigam M*, Sharma R, Balapure AK
4. Oral presentation at: *International Conference on Advances in Biomedical Engineering, Cancer Biology, Bioinformatics and Applied Biotechnology (ABECBAB-2015) Organized by "Krishi Sanskriti" on 25th and 26th July, 2015 at Jawaharlal Nehru University, New Delhi* titled: Role of the transcription-independent mitochondrial p53 pathway to Centchroman induced apoptosis in Human Breast Cancer Cells (HBCCs) cells. Nigam M*, Sharma R, Balapure AK
5. Poster & Abstract at: "5th International Conference on Stem Cells and Cancer (ICSCC-2014): Proliferation, Differentiation, and Apoptosis" at JNU Convention Centre, New Delhi, (8 - 10 November, 2014); titled: Bax, Bak and Cytochrome c mediated mitochondrial signaling during Centchroman mediated Apoptosis Nigam M*, Sharma R, Balapure AK
6. Poster & Abstract at: 41st Annual Conference on the Indian Pharmacological Society & International Conference on Translational Pharmacology 2008 at AIIMS, New Delhi, INDIA; titled "Role of MAPKs and oxidative stress in Centchroman induced apoptosis." Zaidi D, Nigam M*, Ranjan V, Sharma R, Balapure AK
7. Poster & Abstract at: 41st Annual Conference on the Indian Pharmacological Society & International Conference on Translational Pharmacology 2008 at AIIMS, New Delhi, INDIA (18-20 December 2008); titled "Centchroman Potentiates

mitochondrial events leading to oxidative insult in human breast cancer cells."Ranjan V, **Nigam M***, Zaidi D, Sharma R, Balapure AK (**Winner of P.C. Dandiya Award.**)

8. Poster & Abstract at: **12th International Conference on the Interface of Chemistry-Biology in Biomedical Research (ISCBC-2008), Feb 20th-24th, 2008** at Birla Institute of Technology and Science, Pilani-333031 (Rajasthan), India; titled "Involvement of p53, p21 and Bcl2 Family members in Centchroman induced apoptosis in MCF-7 and MDA MB-231 Human Breast Cancer Cells". **Manisha Nigam***, Vishal Ranjan, Neetu Singh, S Srivastava, R Sharma, AK Balapure.

NATIONAL

1. Participated in **Online Lecture Series on "Academic Leadership in Higher Education During and After COVID-19 Pandemic"** organized by Faculty development centre, HNB Garhwal University (A Central University), Srinagar (Garhwal) on **22-26 June, 2020**.
2. Chaired a session in International webinar on "Microbial Diversity: from health to environment" organised by Department of Botany and Microbiology, H.N.B. Garhwal University (A Central University), Srinagar (Garhwal), Uttarakhand in collaboration with Association of Microbiologists of India (AMI), Srinagar (Garhwal) Unit, India on 27th June 2020.
3. Participated in Two Day webinar on "Tackling COVID-19 through traditional ways" organised by Department of Botany and Microbiology, Gurukul Kangri Vishwavidyalaya, Haridwar, Uttarakhand on 19-20 June 2020.
4. Participated in Two Day webinar on "Gender Equality & Women's Rights" jointly organized by Anti-Discrimination Cell, Women study centre and Cell for combating sexual harassment of women, H.N.B. Garhwal University (A Central University), Srinagar (Garhwal), Uttarakhand on 9th June, 2020
5. Participated in One Day webinar on "Food security in the times of pandemic" organized by Department of Biotechnology, H.N.B. Garhwal University (A Central University), Srinagar (Garhwal), Uttarakhand on 16th May, 2020.
6. Participated in the Webinar Lecture Series on the topic of "Covid 19 and Ayurveda" held on April,28, 2020, organized by Amity Institute of Indian System of Medicine, Health & Allied Sciences Domain, Amity University Uttar Pradesh, Noida -INDIA
7. Invited talk on "**National Service Scheme**" as a resource person in Induction programme organized by Department of Physical Education on 4th Sept 2018
8. Invited Lecture on "**Cancer and Immunization**" on "World Immunology Day", sponsored by Indian Immunology Society, New Delhi at Department of Biochemistry, H.N.B. Garhwal University (A Central University), Birla campus, Srinagar (Garhwal) on 1st May, 2018.
9. Invited Lecture on "**Cancer and tuberculosis: an unexplored challenge**" in "World Tuberculosis Day 2018" organized by Department of Botany and Microbiology, H.N.B. Garhwal University (A Central University), Srinagar (Garhwal) on 24th March 2018
10. Delivered lecture as a resource person on "**Cancer: Introduction, awareness and prevention**" at Birla campus unit, National service scheme, HNB Garhwal University (A Central University), Srinagar (Garhwal), on 7th Feb 2018 during 7 days special camps for boys (7th to 13th February 2018).

11. Keynote Address & Lecture on Breast Cancer in "World Cancer Day" at Department of Biochemistry, H.N.B. Garhwal University (A Central University), Birla campus, Srinagar (Garhwal) on 4th Feb, 2018.
12. Delivered lecture as a resource person on "**Breast cancer: Introduction, awareness and prevention**" at Birla campus unit, National service scheme, HNB Garhwal University (A Central University), Srinagar (Garhwal), on 22nd Jan 2018 during 7 days special camps for girls (22nd to 28th January 2018).
13. Poster presentation at: 86th Annual Conference of Society of Biological Chemists (SBC-2017) on "Emerging Discoveries in health and agricultural sciences" at, **Jawaharlal Nehru University, New Delhi**, 16-19th November 2017. titled "Accelerated ageing induces physiological and biochemical changes in tomato involving MAPK pathways" Nigam M
14. Invited Lecture on "Infectious diseases" on "World Immunology Day", sponsored by Indian Immunology Society, New Delhi at Department of Biochemistry, H.N.B. Garhwal University (A Central University), Birla campus, Srinagar (Garhwal) on 29th April, 2017.
15. Keynote Address & Lecture on Breast Cancer in "World Cancer Day" (THEME: "We can, I can") at Department of Biochemistry, H.N.B. Garhwal University (A Central University), Birla campus, Srinagar (Garhwal) on 4th Feb, 2017.
16. Keynote address & lecture on "Gender Issues" at Department of Biochemistry, H.N.B. Garhwal University (A Central University), Birla campus, Srinagar (Garhwal) on 5th Sept, 2016.
17. Oral presentation at: National Conference on Recent Advances in Science & Technology, organized by Uttaranchal college of applied and life sciences, Uttaranchal University, Dehradun on 27-28 February 2017 titled; *Influence of the Ageing on Biochemical and Physiological changes in Tomato* Nigam M
18. Oral Presentation and abstract at: **National conference on Microbes in Extreme Environment: Diversity and Translational Applications (MEEDTA- 2015) organized by HNB Garhwal University (A Central University), Srinagar (30-31 Oct 2015)** titled; Microbiome: Interlinking with the Cancer. Nigam M
19. Poster at: **2nd Biotech Congress, Dec 18th-22nd, 2006** at Rajiv Gandhi Biotechnology Centre, Nagpur, India; titled "Non-Genomic events in Centchroman mediated Apoptosis in MCF-7 Human Breast Cancer Cells". Balapure AK, Ranjan V, Nigam M*, Sharma R.
20. Poster presented at: **XXIX All India Cell Biology conference and symposium on Gene to Genome: Environment and Chemical Interaction, Jan 17-20th, 2006** at Industrial Toxicology Research Centre, Lucknow-226001, India; titled "Induction of Apoptosis in MCF-7 and MDA MB-231 Human Breast Cancer Cells by antiestrogen Centchroman". **Manisha Nigam***, Vishal Ranjan, S Srivastava, R Sharma, AK Balapure.

Conference/Symposium/Workshop Organized

1. Organized Webinar on **World Immunology day-2020** on "**COVID-19: Immunopathology and its implications for therapy**", 29th April 2020, **CONVENER**
2. Organized "National Science Day" at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal), February 28, 2020, **ORGANISER**

3. Organized "World Cancer Day", at Department of Biochemistry, HNB Garhwal University, Birla campus, Srinagar (Garhwal), 4th Feb, 2020, **CONVENER**
4. Organized "Induction Programme" for freshers on 16th Aug 2018 at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal) **ORGANISER**
5. Organized "World Cancer Day", at Department of Biochemistry, HNB Garhwal University, Birla campus, Srinagar (Garhwal), 4th Feb, 2018, **CONVENER**
6. Organized "National Science Day" at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal), February 28, 2018, **ORGANISER**
7. Organized "Induction Programme" for freshers on 22nd Aug 2017 at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal) **ORGANISER**
8. Organized "Swacha Bharat Abhiyan" event on 2nd Oct 2014, 2015, 2016, 2017, 2018 at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal)
9. Organized "World Cancer Day", at Department of Biochemistry, HNB Garhwal University, Birla campus, Srinagar (Garhwal), 4th Feb, 2017, **CONVENER**
10. Organized lectures on "Gender Issues" at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal), 5th Sept, 2016, **ORGANISER**
11. Organized "National Science Day" at Department of Biochemistry, HNB Garhwal University Birla campus, Srinagar (Garhwal), February 28-29, 2016, **CONVENER**

PUBLICATIONS

1. Salehi B, Mishra AP, Nigam M, Karazhan N, Shukla I, Dadasiewicz AK, Sawicka B, Głowacka A, Darwish MSA, Tarawneh AH, Gadetskaya AV, Cabral C, Salgueiro L, Victoriano M, Martorell M, Docea AO, Abdolshahi A, Calina D, Sharifi-Rad J. *Ficus* plants: State of the art from a phytochemical, pharmacological, and toxicological perspective *Phytotherapy Research* 2020 (**Impact factor 4.0**) <https://doi.org/10.1002/ptr.6884>
2. Mishra AP, Devkota HP, Nigam M, Adetunji CO, Srivastava N, Saklani S, Shukla I, Azmi L, Shariati MA, Coutinho HDM, Khaneghah AM. Combination of essential oils in dairy products: A review of their functions and potential benefits *LWT - Food Science and Technology* 2020, 133, 110116 (Impact factor **4.0**)
3. Sharifi-Rad M, Anil Kumar NV, Zucca P, Varoni EM, Dini L, Panzarini E, Rajkovic J, Tsouh Fokou PV, Azzini E, Peluso I, Prakash Mishra A, Nigam M, El Rayess Y, Beyrouthy ME, Polito L, Iriti M, Martins N, Martorell M, Docea AO, Setzer WN, Calina D, Cho WC and Sharifi-Rad J. Lifestyle, Oxidative Stress, and Antioxidants:

Back and Forth in the Pathophysiology of Chronic Diseases. *Frontiers in Physiology* 2020, 11:694. (Impact factor **4.13**)

4. Salehi, B., P. Mishra, A., Nigam, M., Kobarfard, F., Javed, Z., Rajabi, S., Khan, K., Ahsan Ashfaq, H., Ahmad, T., Pezzani, R., Ramírez-Alarcón, K., Martorell, M., C. Cho, W., Ayatollah, S., Sharifi-Rad, J. (2020). Multivesicular liposome (DepoFoam) in human diseases. *Iranian Journal of Pharmaceutical Research*, 19(2), 9-21. doi: 10.22037/ijpr.2020.112291.13663 (Impact factor **1.505**)
5. Nigam M, Mishra AP, Devkota AA, Dirar AI, Hassan MM, Adhikari A, Belwal T, Devkota HP. Fruits of *Terminalia chebula* Retz.: A review on traditional uses, bioactive chemical constituents and pharmacological activities *Phytotherapy Research* 2020, 34(10), 1-19 (Impact factor **4.0**)
6. Salehi B, Konovalov DA, Fru P, Kapewangolo P, Peron G, Ksenija MS, Cardoso SM, Pereira OR, Nigam M, Nicola S, Pignata G, Rapposelli S, Sestito S, Kumar NVA, Cádiz-Gurrea ML, Segura-Carretero A, Mishra AP, Sharifi-Rad M, Cho WC, Taheri Y, Setzer WN, Sharifi-Rad J. Areca catechu—From farm to food and biomedical applications. *Phytotherapy Research* 2020, 34(9), 1-19 (Impact factor **4.0**)
7. Salehi, B.; Azzini, E.; Zucca, P.; Maria Varoni, E.; V. Anil Kumar, N.; Dini, L.; Panzarini, E.; Rajkovic, J.; Valere Tsouh Fokou, P.; Peluso, I.; Prakash Mishra, A.; Nigam, M.; El Rayess, Y.; El Beyrouthy, M.; N. Setzer, W.; Polito, L.; Iriti, M.; Sureda, A.; Magdalena Quetglas-Llabrés, M.; Martorell, M.; Martins, N.; Sharifi-Rad, M.; M. Estevinho, L.; Sharifi-Rad, J. Plant-Derived Bioactives and Oxidative Stress-Related Disorders: A Key Trend towards Healthy Aging and Longevity Promotion. *Applied Sciences* **2020**, 10, 947 (Impact Factor: **2.217**)
8. Naseri R, Navabi SJ, Samimi Z, Mishra AP, Nigam M, Chandra H, Olatunde A, Tijjani H, Morais-Urano R, Farzaei MH Targeting Glycoproteins as a therapeutic strategy for diabetes mellitus and its complications *DARU J Pharm Sci* (2020). <https://doi.org/10.1007/s40199-020-00327-y> (Impact Factor: **2.698**)
9. Salehi B, Sahrifi-Rad J, Seca AML, Pinto DCGA, Michalak I, Trincone A, Mishra AP, Nigam M, Zam W and Martins N Current Trends on Seaweeds: Looking at Chemical Composition, Phytopharmacology, and Cosmetic Applications *Molecules* 2019, 24(22), 4182; <https://doi.org/10.3390/molecules24224182> (Impact Factor: **3.09**)
10. Nigam M, Atanassova M, Mishra AP, Pezzani R, Devkota HP, Plygun S, Salehi B, Setzer WN and Sharifi-Rad J Bioactive Compounds and Health Benefits of *Artemisia* Species *Natural Product Communications* 2019: 14(1):1–17 DOI: 10.1177/1934578X19850354 (Impact Factor: **0.554**)
11. Nigam M, Suleria H.A.R., Farzaei M.H., Mishra A.P. Marine anticancer drugs and their relevant targets: a treasure from the ocean. *DARU Journal of Pharmaceutical*

12. Saklani S, Rawat Y, Plygun S, Shariati MA, Nigam M, Maurya VK, Yadav A, Mishra AP Biological activity and preliminary phytochemical screening of *Terminalia alata heyne ex roth*. J Microbiol Biotech Food Sci 2019 : 8 (4) 1010-1015
13. Nigam M, Mishra AP, Salehi B, Kumar M, Sahrifi-Rad M, Coviello E, Iriti M, Sharifi-Rad J Accelerated ageing induces physiological and biochemical changes in tomato seeds involving MAPK pathways. Scientia Horticulturae 2019, 248, 20-28 (**Impact Factor: 2.76**)
14. Waheed M, Hussain MB, Javed A, Mushtaq Z, Hassan S, Shariati MA, Khan MU, Majeed M, Nigam M, Mishra AP, Heydari M., Honey and cancer: A mechanistic review Clinical Nutrition 2019 ,38 (6):2499-2503. (**Impact Factor: 6.4**)
15. Salehi, B.; Mishra, A.P.; Nigam, M.; Sener, B.; Kilic, M.; Sharifi-Rad, M.; Fokou, P.V.T.; Martins, N.; Sharifi-Rad, J. Resveratrol: A Double-Edged Sword in Health Benefits. Biomedicines 2018, 6(3), 91. (**Impact Factor: 4.7**)
16. Nigam M, Saklani S, Plygun S, Mishra AP. Antineoplastic potential of the *Vitex* species: An overview Boletín latino americano y del caribe de plantas medicinales y aromáticas (2018),17(5): 492-502 (**Impact Factor: 0.79**)
17. Kumar, M., Yusuf, M.A., Nigam, M. An Update on Genetic Modification of Chickpea for Increased Yield and Stress Tolerance. Molecular Biotechnology 2018, 60(8):651-663 (**Impact Factor: 1.815**)
18. Mishra, A.P., Salehi, B., Sharifi-Rad, M., Pezzani R., Kobarfard F., Sharifi-Rad J., Nigam M. Programmed Cell Death, from a Cancer Perspective: An Overview Molecular Diagnosis and Therapy 2018, 22: 281-295. (**Impact Factor: 3.0**)
19. M Kumar, MA Yusuf, PS Chauhan, M Nigam Pseudomonas putida and Bacillus amyloliquefaciens alleviates the adverse effect of pesticides and poise soil enzymes activities in chickpea (*Cicer arietinum* L.) rhizosphere. Tropical plant research 2017, 4 (3):405-418.
20. Saklani, S.; Mishra, A.P.; Chandra, H.; Atanassova, M.S.; Stankovic, M.; Sati, B.; Shariati, M.A.; Nigam, M.; Khan, M.U.; Plygun, S.; Elmsellem, H.; Suleria, H.A.R. Comparative Evaluation of Polyphenol Contents and Antioxidant Activities between Ethanol Extracts of *Vitex negundo* and *Vitex trifolia* L. Leaves by Different Methods. Plants 2017, 6, 45-55. (**Impact Factor: 2.6**)
21. Singh, N., Nigam, M., Ranjan, V., Garg, V.K., Sharma, S., Chaturvedi, R., Shankar, R., Kumar, S., Sharma, R., Balapure, A.K., Rath, S.K. Resveratrol as an adjunct therapy in cyclophosphamide-treated MCF-7 cells and breast tumor explants Cancer Science 2011, 102, 1059-1067. (**Impact Factor: 4.7**)
22. Nigam, M., Singh, N., Ranjan, V., Zaidi, D., Nigam, D., Sharma, R., Gupta, D.K., Sundaram, S., Balapure, A. K. Centchroman mediated apoptosis involves cross-talk between extrinsic/intrinsic pathways and oxidative regulation. Life Sciences 2010, 87: pp. 750-758 (**Impact Factor: 3.4**)

23. Nigam, M., Ranjan, V., Srivastava, S., Sharma, R., Balapure, A. K. Centchroman induces G0/G1 arrest and caspase-dependent apoptosis involving mitochondrial membrane depolarization in MCF-7 and MDA MB-231 Human Breast Cancer Cells. Life Sciences 2008, 82:577-590 (**Impact Factor: 3.4**)
24. Singh, N., Nigam, M., Ranjan, V., Sharma, R., Balapure, A. K., Rath, S.K. Caspase-mediated enhanced apoptotic action of Cyclophosphamide and Resveratrol treated MCF-7 cells. Journal of Pharmacological Sciences 2008, 109: 473-489. (**Impact Factor: 2.575**)

Total Number of Research Publications: 24